Torus Glued Comparison of Level 3 Eigenfunctions and Level 2 Eigenfunctions By Averaging (First 150)

SPUR 2016

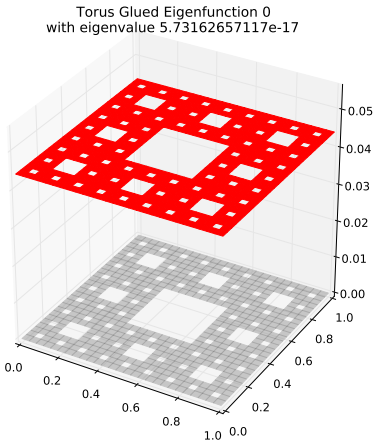
May 23, 2018

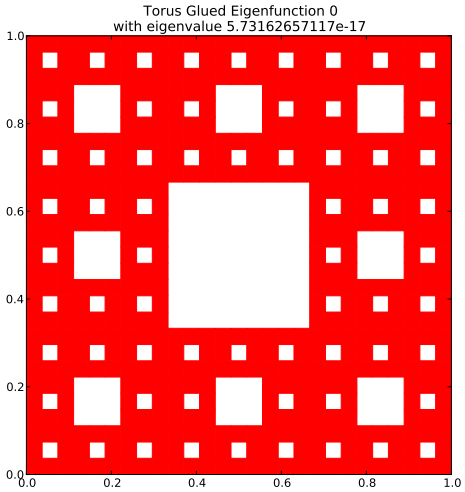
Key to Dot Value

Dot values are in general between 0 and 1; those close to 0 are better matches, while those close to 1 are not good matches. Dot value 2 indicates the eigenvalue averages to the zero function. Dot value 3 indicates the projection onto the closest eigenspace is zero.

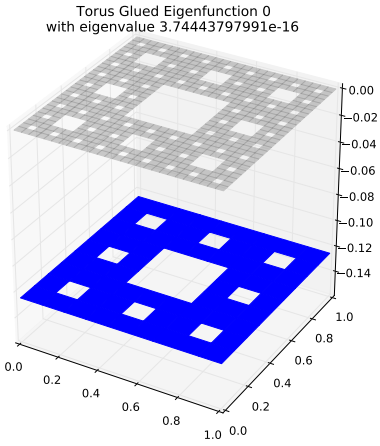
1 $M = 3$ Eigenfunction 0

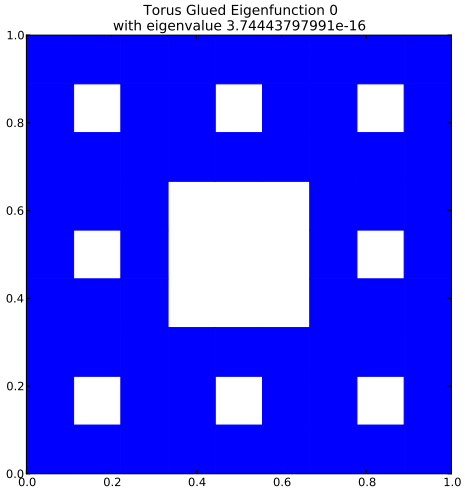
$M = 3$ Eigenfunction 0 has eigenvalue 5.73162657117e-17





Compare to $m = 2$ eigenspace with eigenvalue 3.74443797991e-16

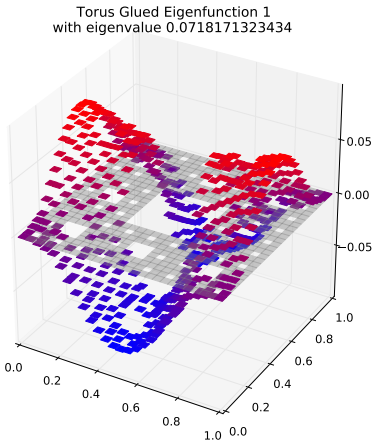


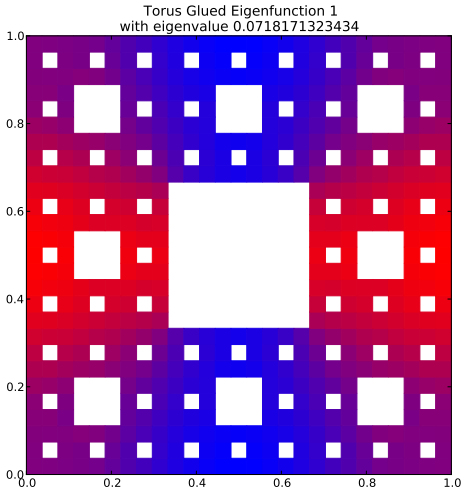


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.153070410084$
Dot Value: 0.0

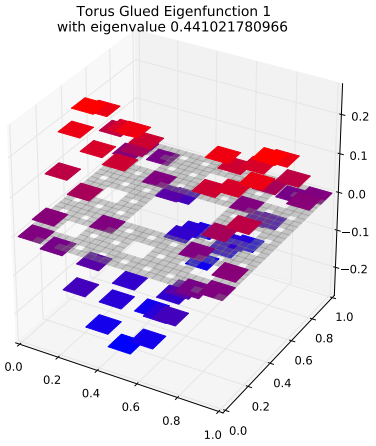
2 $M = 3$ Eigenfunction 1

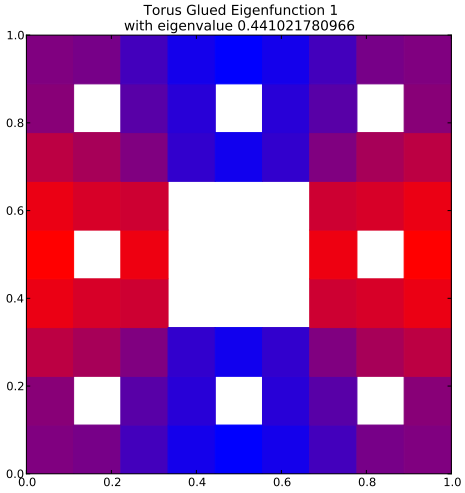
$M = 3$ Eigenfunction 1 has eigenvalue 0.0718171323434





Compare to $m = 2$ eigenspace with eigenvalue 0.441021780966

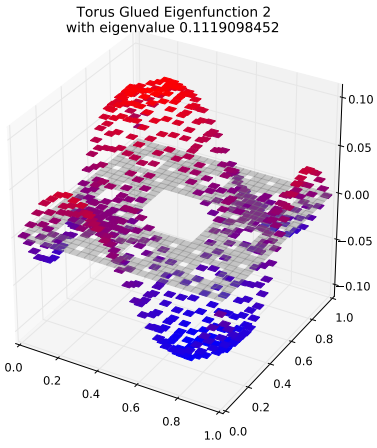


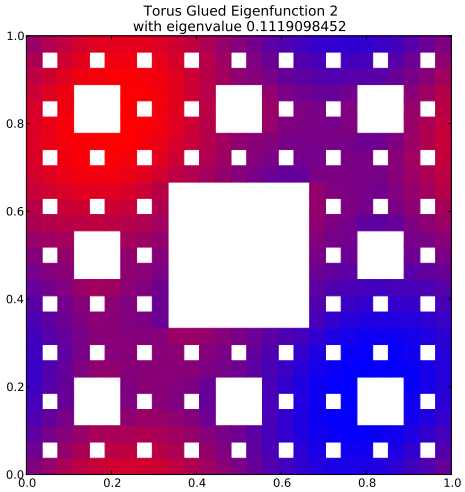


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.162842597447$
Dot Value: 0.0003112650688600338

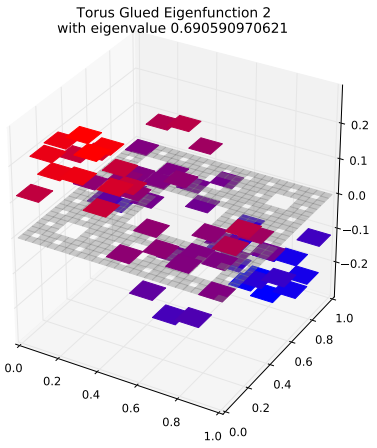
3 $M = 3$ Eigenfunction 2

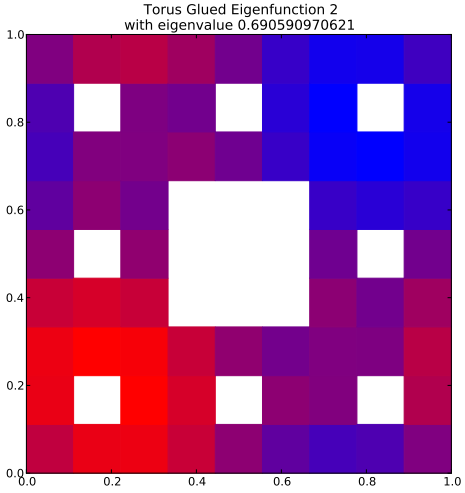
$M = 3$ Eigenfunction 2 has eigenvalue 0.1119098452





Compare to $m = 2$ eigenspace with eigenvalue 0.690590970621
(Note: Eigenspace Dimension > 1)

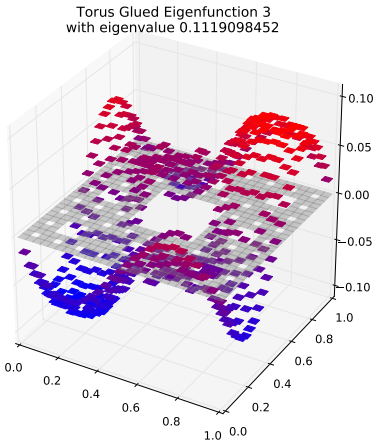


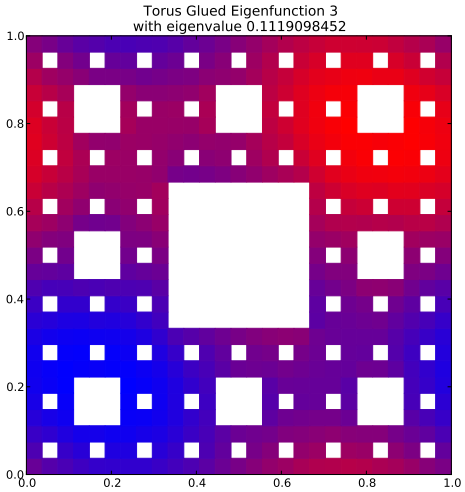


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.162049389524$
Dot Value: 0.0008691073914722791

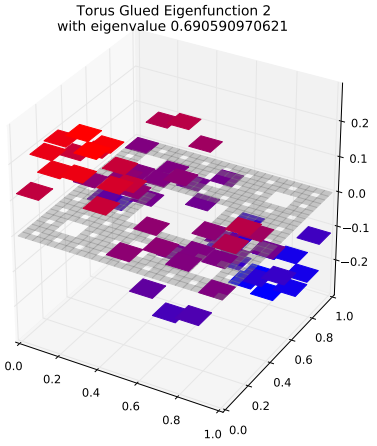
4 $M = 3$ Eigenfunction 3

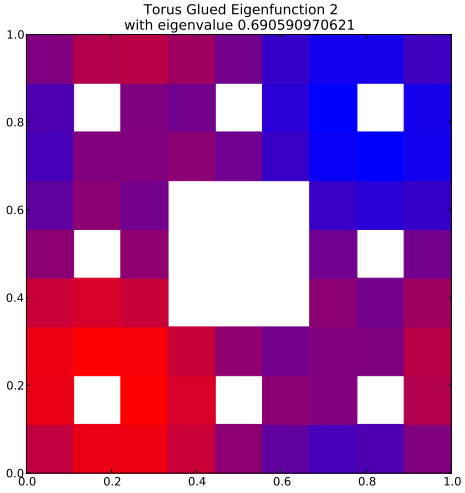
$M = 3$ Eigenfunction 3 has eigenvalue 0.1119098452





Compare to $m = 2$ eigenspace with eigenvalue 0.690590970621
(Note: Eigenspace Dimension > 1)

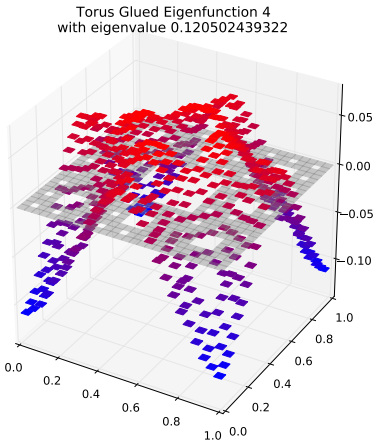


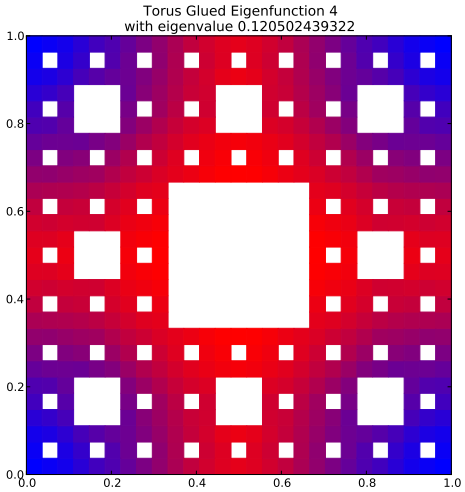


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.162049389524$
Dot Value: 0.0008691073914720571

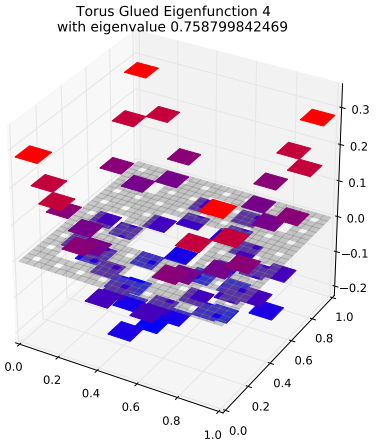
5 $M = 3$ Eigenfunction 4

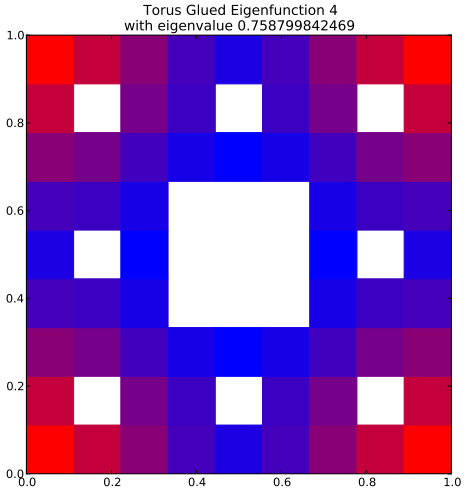
$M = 3$ Eigenfunction 4 has eigenvalue 0.120502439322





Compare to $m = 2$ eigenspace with eigenvalue 0.758799842469

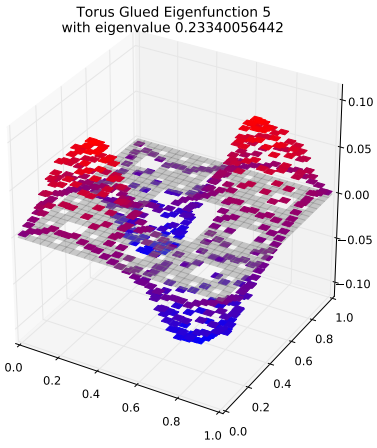


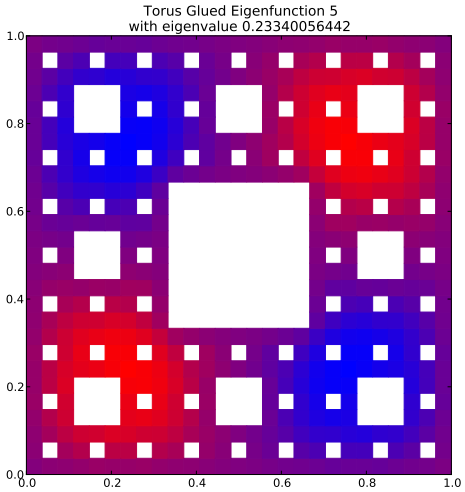


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.158806621427$
Dot Value: 0.0006181836074257152

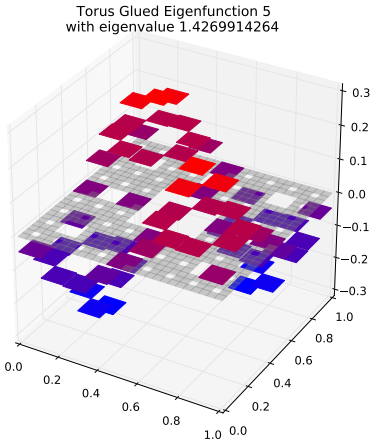
6 $M = 3$ Eigenfunction 5

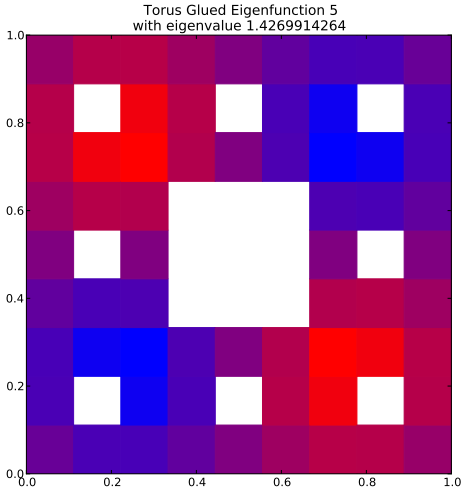
$M = 3$ Eigenfunction 5 has eigenvalue 0.23340056442





Compare to $m = 2$ eigenspace with eigenvalue 1.4269914264

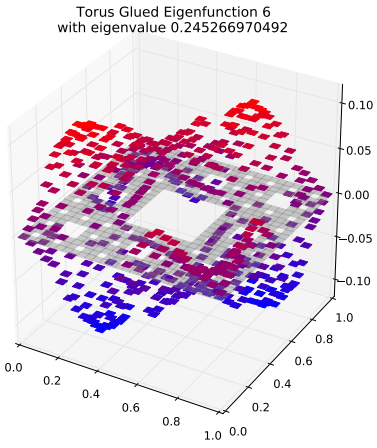


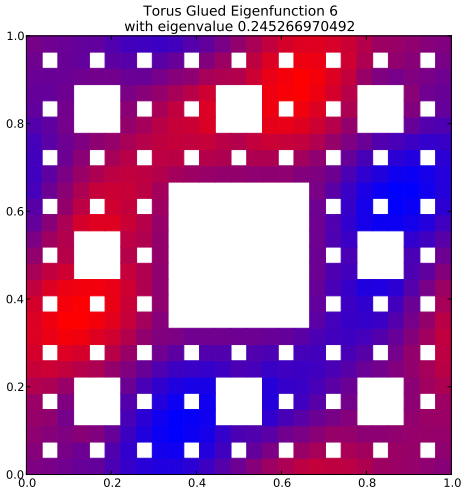


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.163561294133$
Dot Value: 0.0025413019411489 88

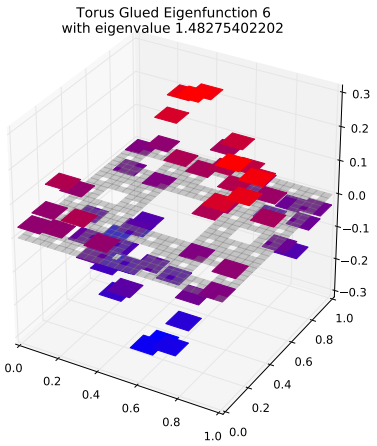
7 $M = 3$ Eigenfunction 6

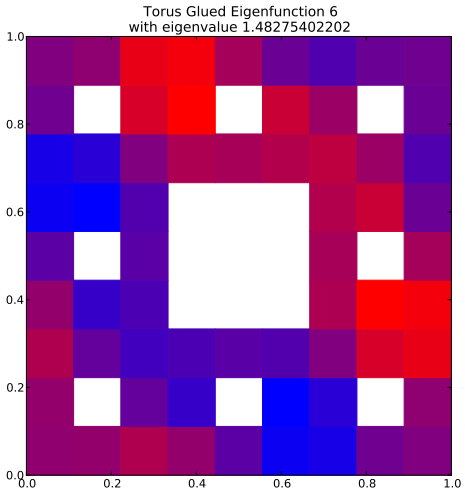
$M = 3$ Eigenfunction 6 has eigenvalue 0.245266970492





Compare to $m = 2$ eigenspace with eigenvalue 1.48275402202
(Note: Eigenspace Dimension > 1)

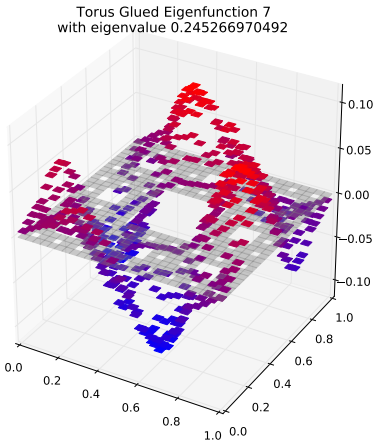


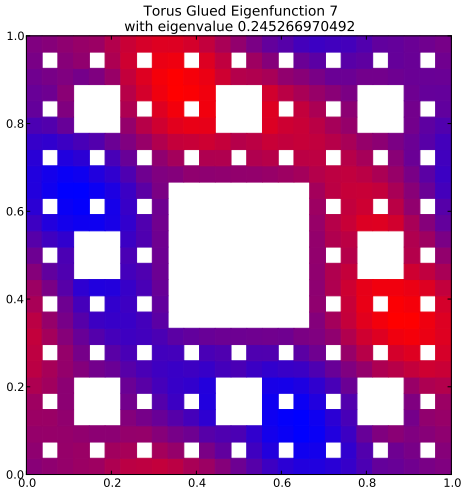


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.165413121023$
Dot Value: 0.0046499139690369 12

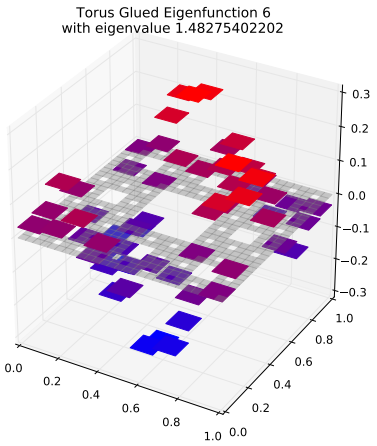
8 $M = 3$ Eigenfunction 7

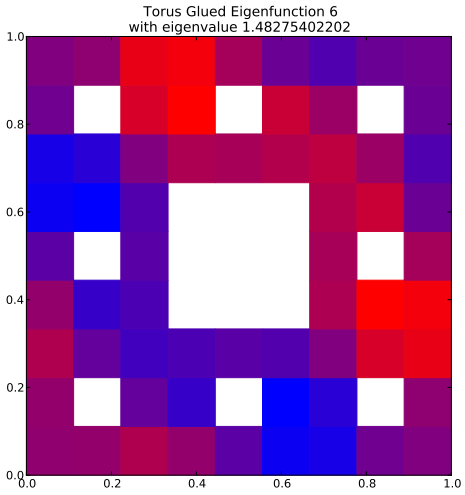
$M = 3$ Eigenfunction 7 has eigenvalue 0.245266970492





Compare to $m = 2$ eigenspace with eigenvalue 1.48275402202
(Note: Eigenspace Dimension > 1)

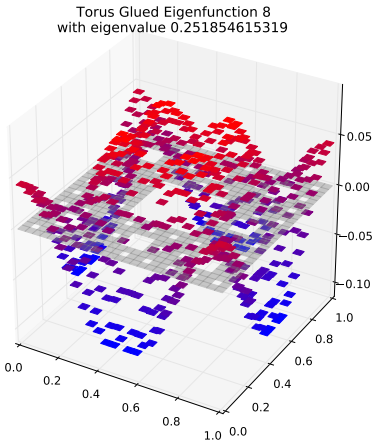


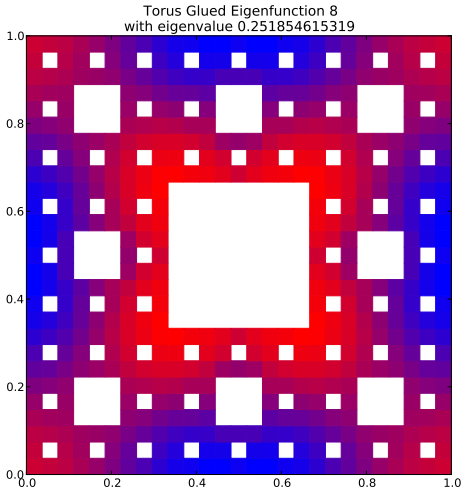


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.165413121023$
Dot Value: 0.004649913969036579

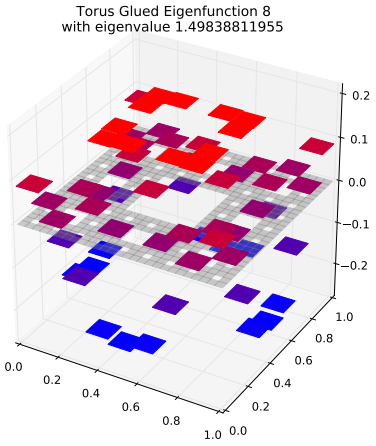
9 $M = 3$ Eigenfunction 8

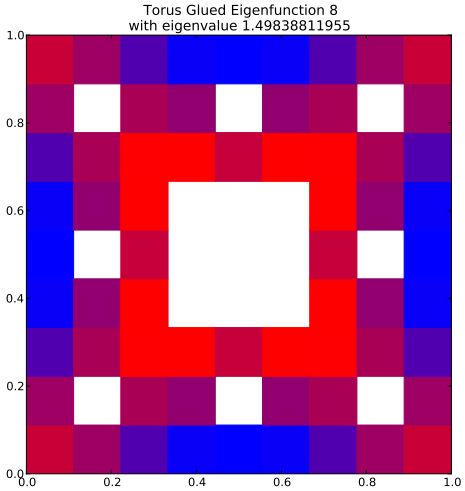
$M = 3$ Eigenfunction 8 has eigenvalue 0.251854615319





Compare to $m = 2$ eigenspace with eigenvalue 1.49838811955

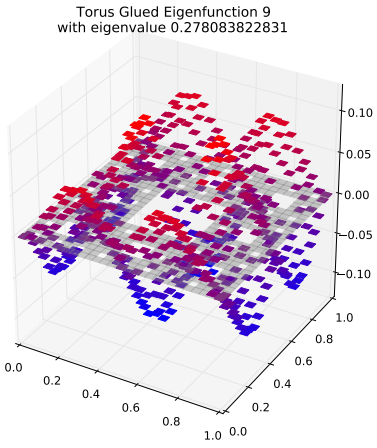


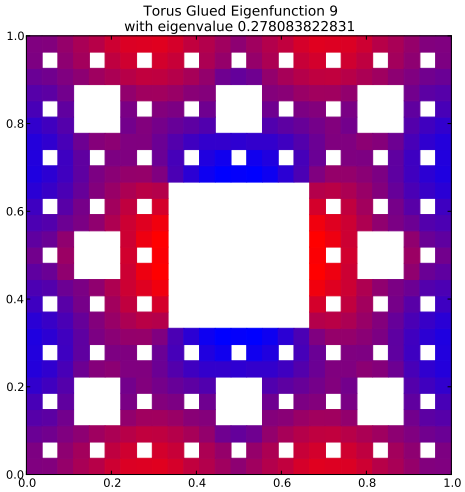


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.16808369743$
Dot Value: 0.0028042394659011 37

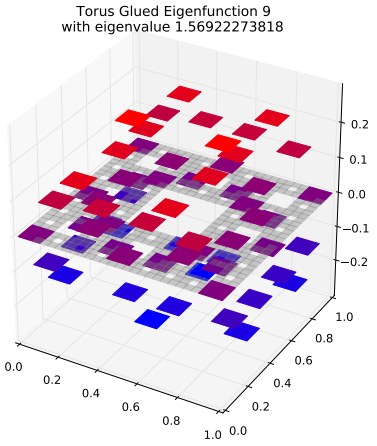
10 $M = 3$ Eigenfunction 9

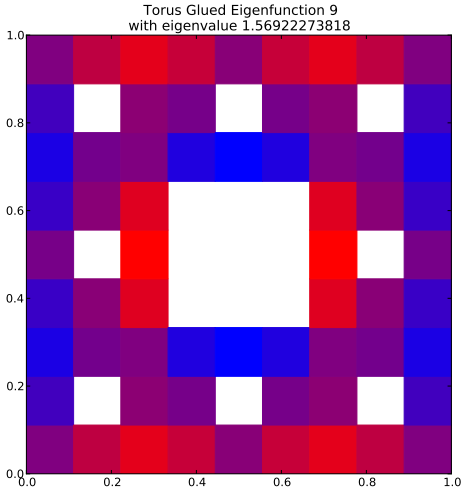
$M = 3$ Eigenfunction 9 has eigenvalue 0.278083822831





Compare to $m = 2$ eigenspace with eigenvalue 1.56922273818

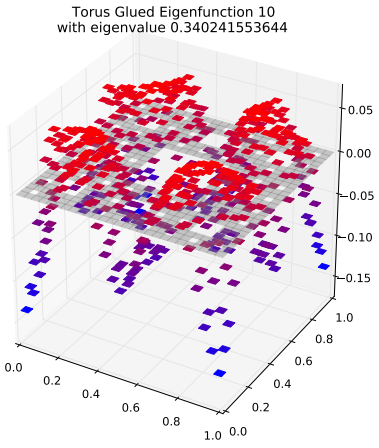


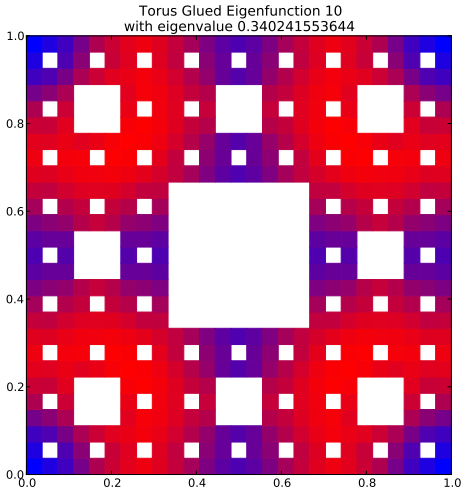


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.177211186191$
Dot Value: 0.0008895272340454508

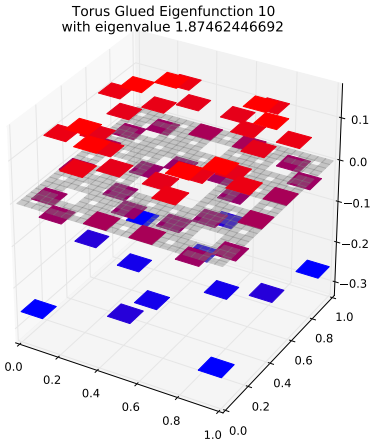
11 $M = 3$ Eigenfunction 10

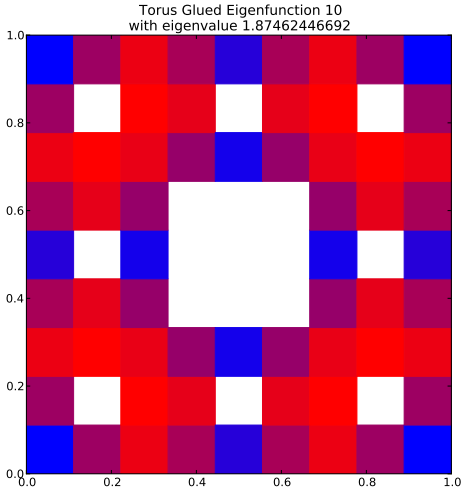
$M = 3$ Eigenfunction 10 has eigenvalue 0.340241553644





Compare to $m = 2$ eigenspace with eigenvalue 1.87462446692

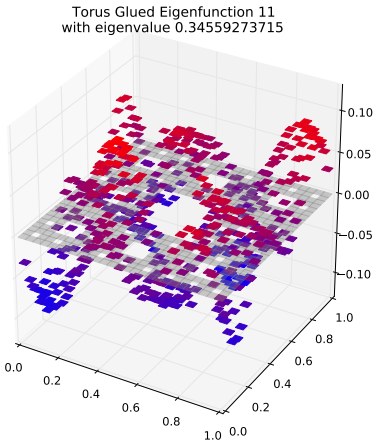


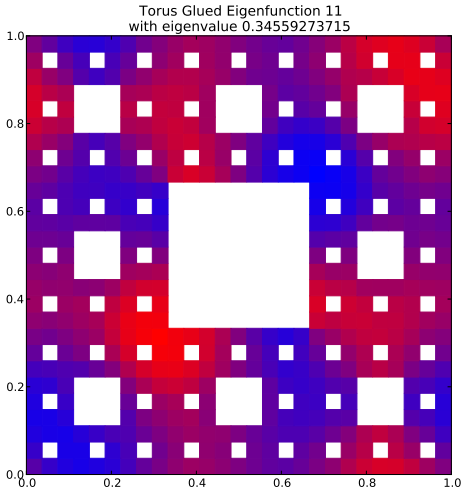


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.181498513247$
Dot Value: 0.017489625328879987

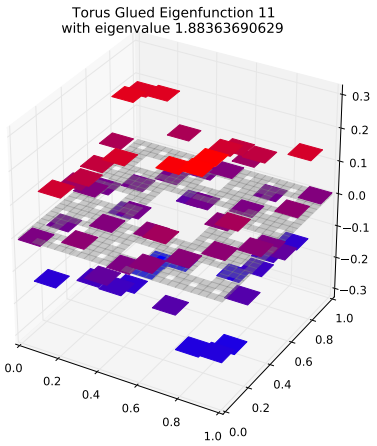
12 $M = 3$ Eigenfunction 11

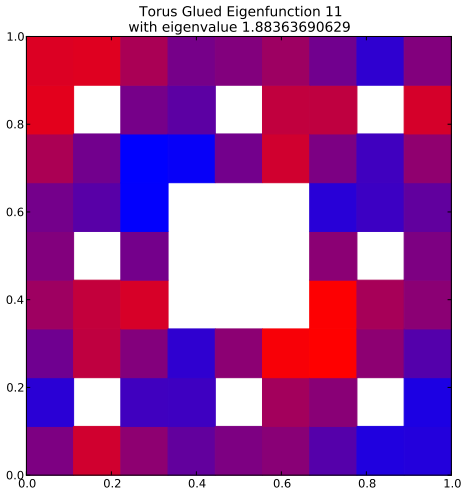
$M = 3$ Eigenfunction 11 has eigenvalue 0.34559273715





Compare to $m = 2$ eigenspace with eigenvalue 1.88363690629
(Note: Eigenspace Dimension > 1)

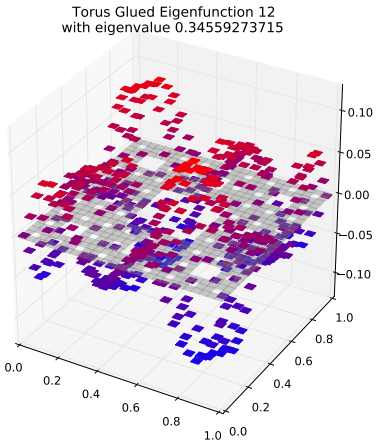


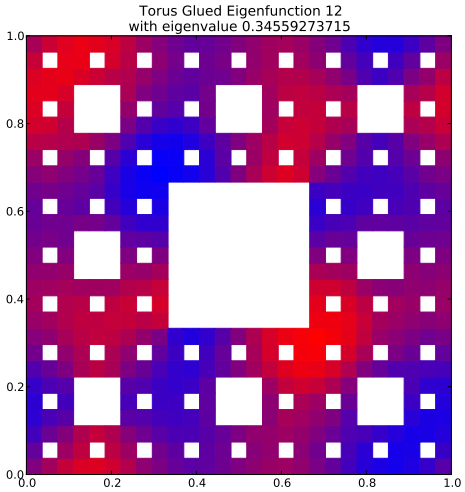


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.183470994859$
Dot Value: 0.0073455809501703495

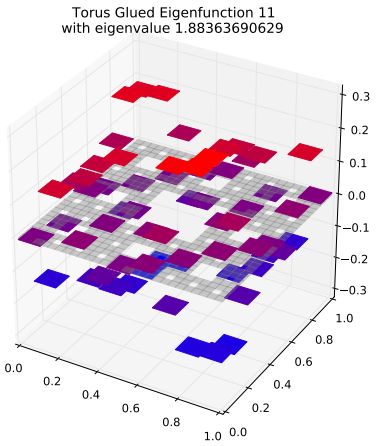
13 $M = 3$ Eigenfunction 12

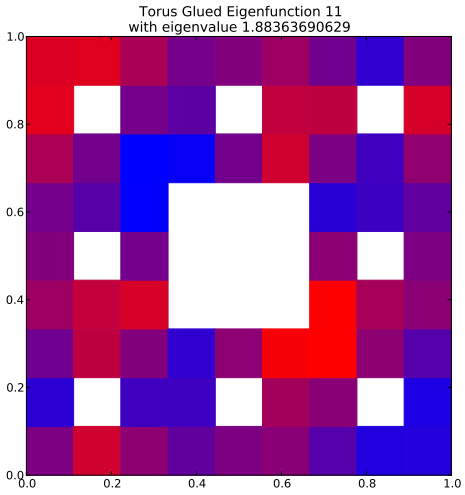
$M = 3$ Eigenfunction 12 has eigenvalue 0.34559273715





Compare to $m = 2$ eigenspace with eigenvalue 1.88363690629
(Note: Eigenspace Dimension > 1)

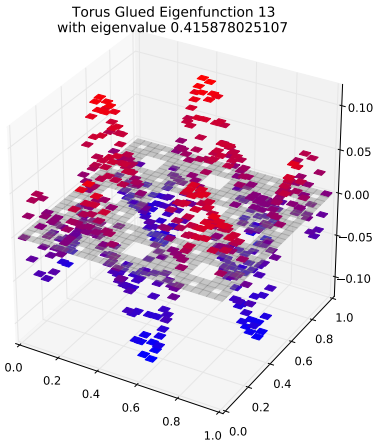


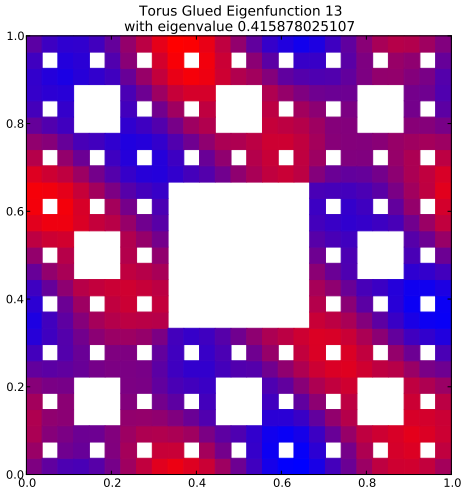


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.183470994859$
Dot Value: 0.0073455809501700164

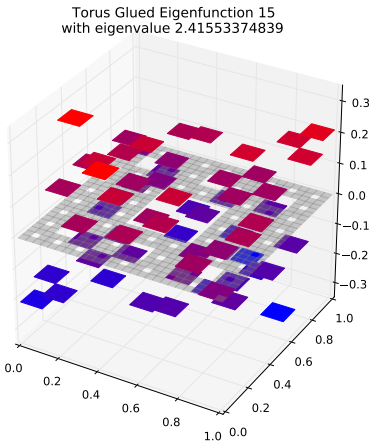
14 $M = 3$ Eigenfunction 13

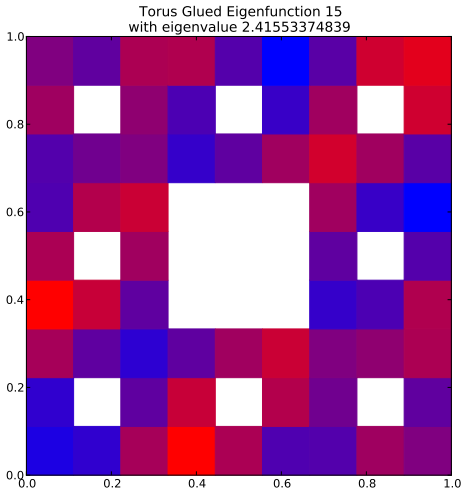
$M = 3$ Eigenfunction 13 has eigenvalue 0.415878025107





Compare to $m = 2$ eigenspace with eigenvalue 2.41553374839
(Note: Eigenspace Dimension > 1)

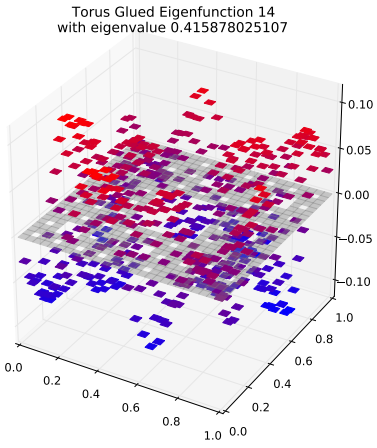


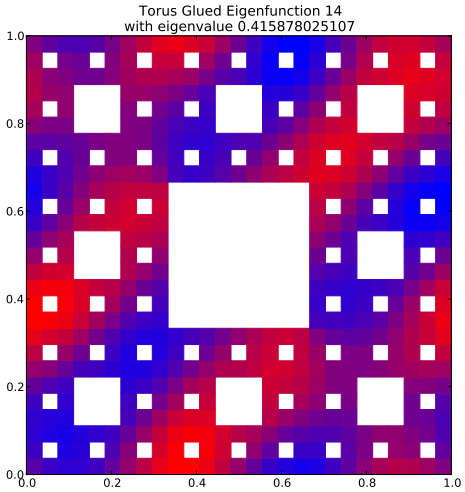


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.17216817003$
Dot Value: 0.010739287809013676

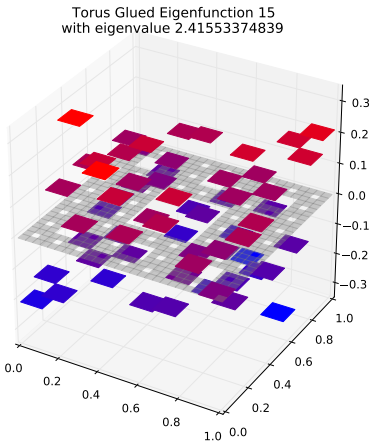
15 $M = 3$ Eigenfunction 14

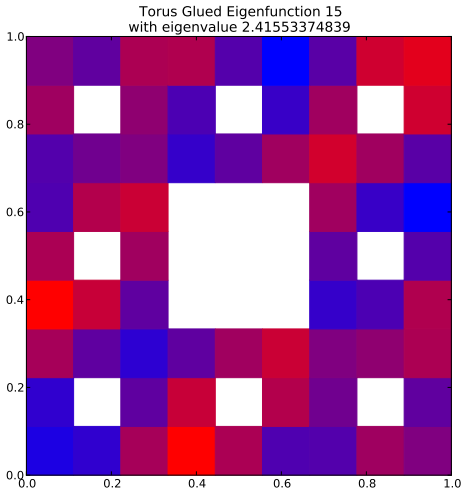
$M = 3$ Eigenfunction 14 has eigenvalue 0.415878025107





Compare to $m = 2$ eigenspace with eigenvalue 2.41553374839
(Note: Eigenspace Dimension > 1)

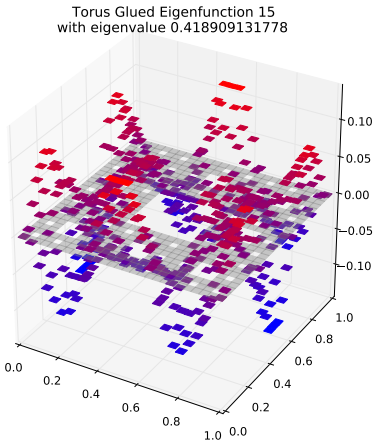


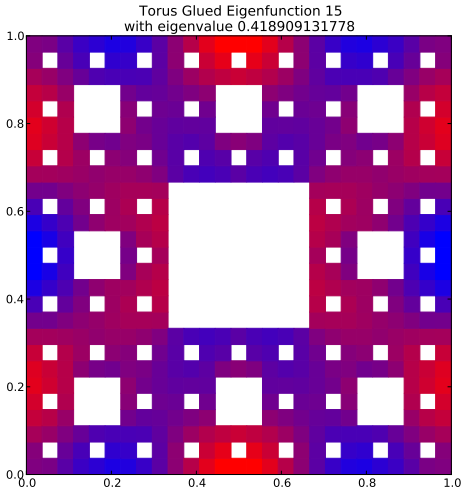


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.17216817003$
Dot Value: 0.010739287809012787

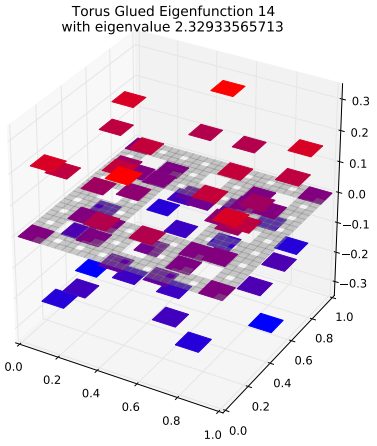
16 $M = 3$ Eigenfunction 15

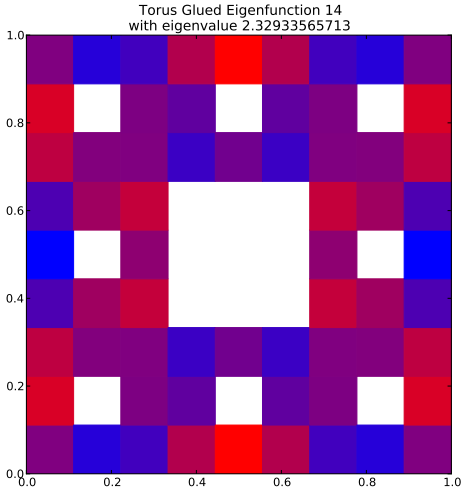
$M = 3$ Eigenfunction 15 has eigenvalue 0.418909131778





Compare to $m = 2$ eigenspace with eigenvalue 2.32933565713

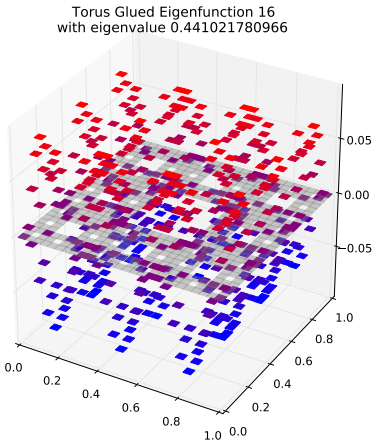


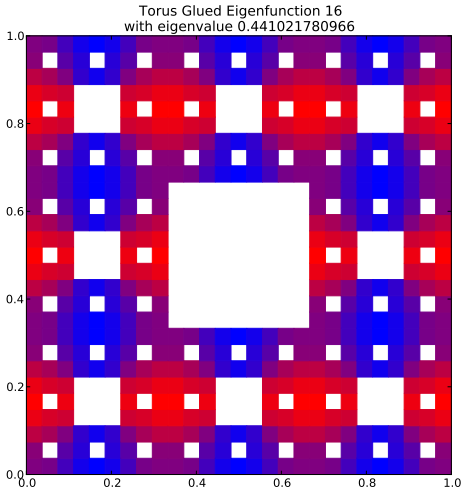


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.17984060412$
Dot Value: 0.0136542351530623

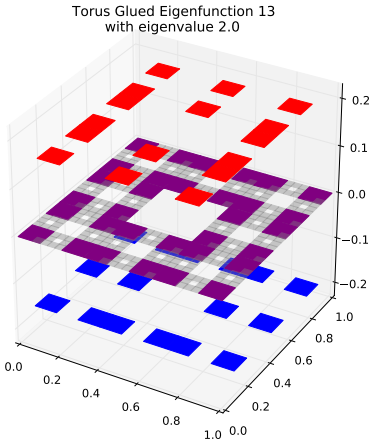
17 $M = 3$ Eigenfunction 16

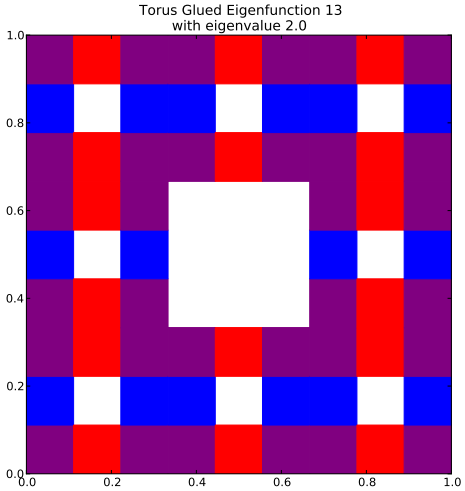
$M = 3$ Eigenfunction 16 has eigenvalue 0.441021780966





Compare to $m = 2$ eigenspace with eigenvalue 2.0

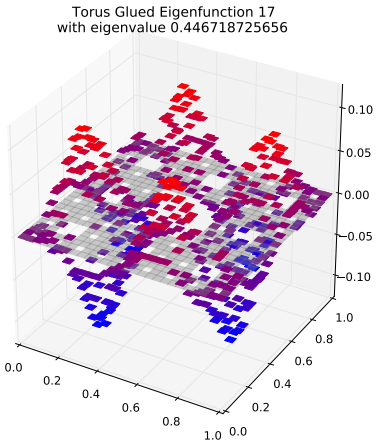


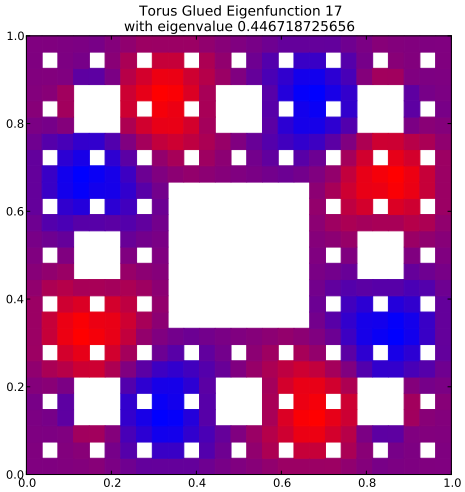


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.220510890483$
Dot Value: 0.0

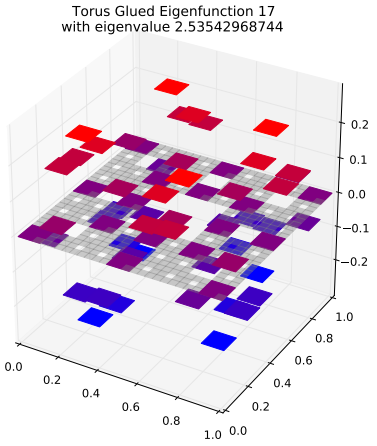
18 $M = 3$ Eigenfunction 17

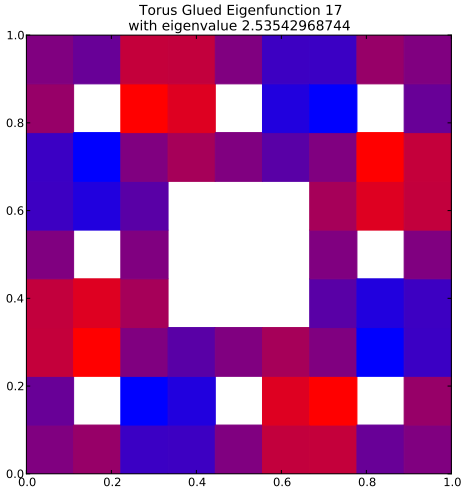
$M = 3$ Eigenfunction 17 has eigenvalue 0.446718725656





Compare to $m = 2$ eigenspace with eigenvalue 2.53542968744

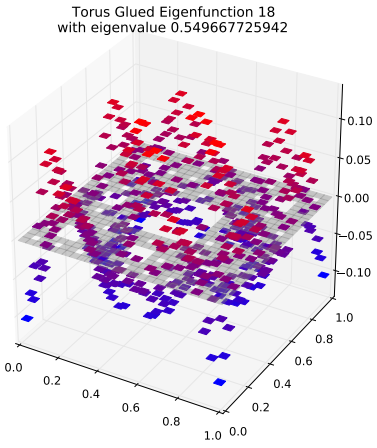


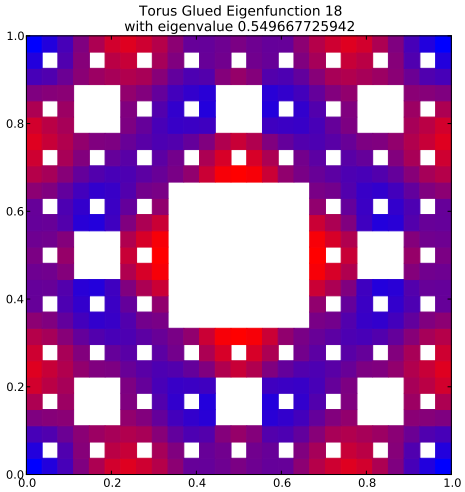


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.176190539958$
Dot Value: 0.004999943466274859

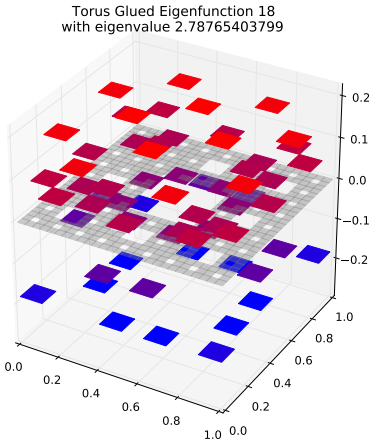
19 $M = 3$ Eigenfunction 18

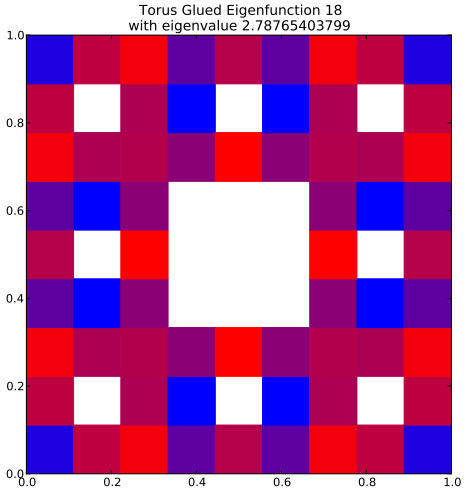
$M = 3$ Eigenfunction 18 has eigenvalue 0.549667725942





Compare to $m = 2$ eigenspace with eigenvalue 2.78765403799

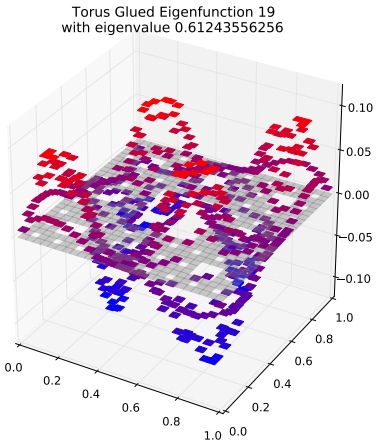


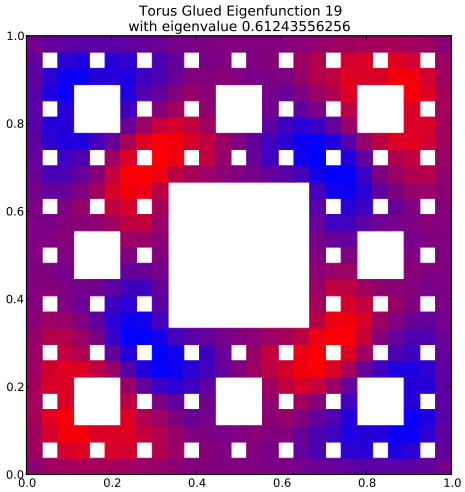


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.197179319403$
Dot Value: 0.10067165746102669

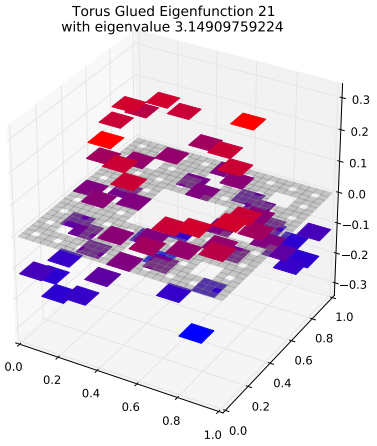
20 $M = 3$ Eigenfunction 19

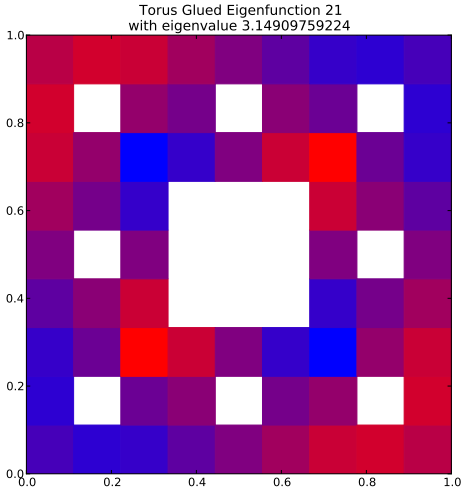
$M = 3$ Eigenfunction 19 has eigenvalue 0.61243556256





Compare to $m = 2$ eigenspace with eigenvalue 3.14909759224

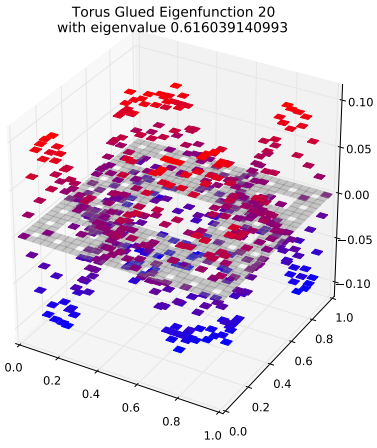


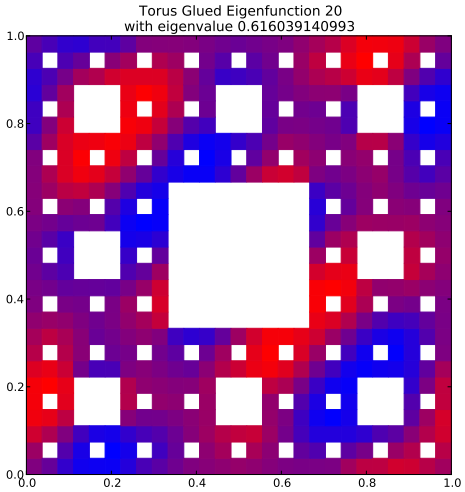


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.194479702397$
Dot Value: 0.026635378676363786

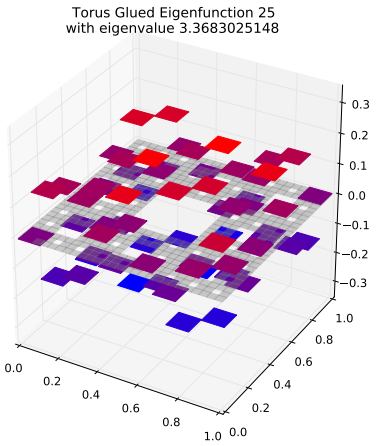
21 $M = 3$ Eigenfunction 20

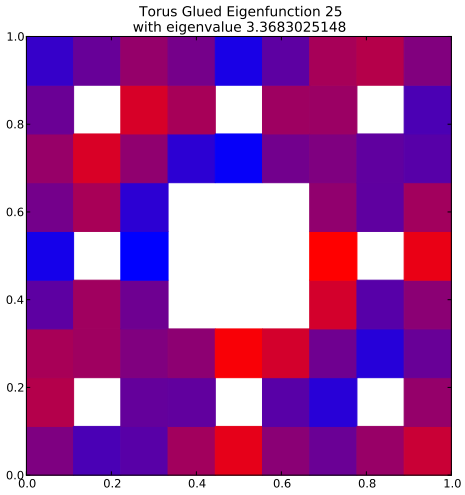
$M = 3$ Eigenfunction 20 has eigenvalue 0.616039140993





Compare to $m = 2$ eigenspace with eigenvalue 3.3683025148
(Note: Eigenspace Dimension > 1)

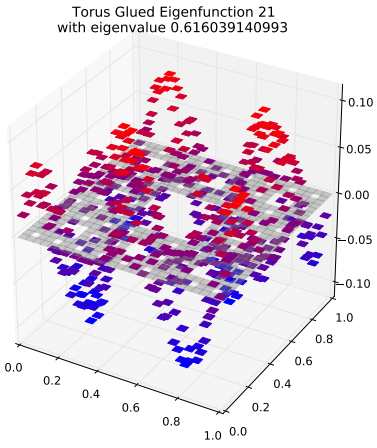


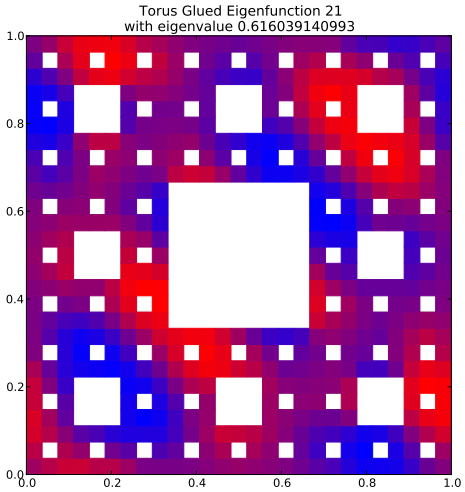


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.182893056157$
Dot Value: 0.24179489926886255

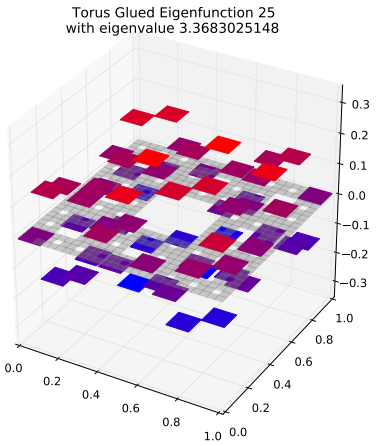
22 $M = 3$ Eigenfunction 21

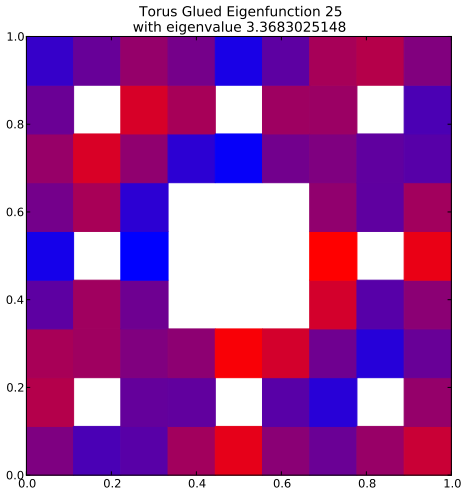
$M = 3$ Eigenfunction 21 has eigenvalue 0.616039140993





Compare to $m = 2$ eigenspace with eigenvalue 3.3683025148
(Note: Eigenspace Dimension > 1)

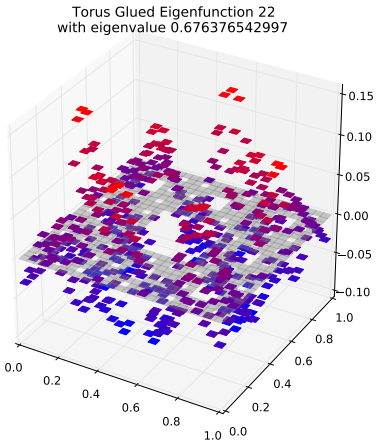


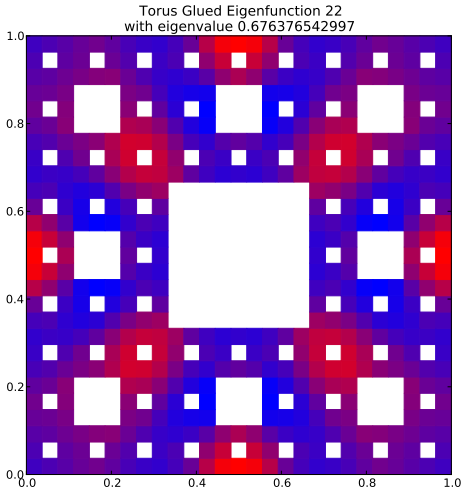


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.182893056157$
Dot Value: 0.2417948992688641

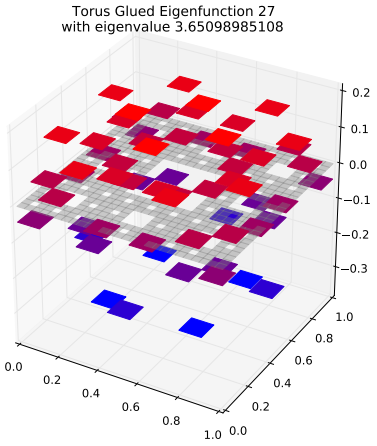
23 $M = 3$ Eigenfunction 22

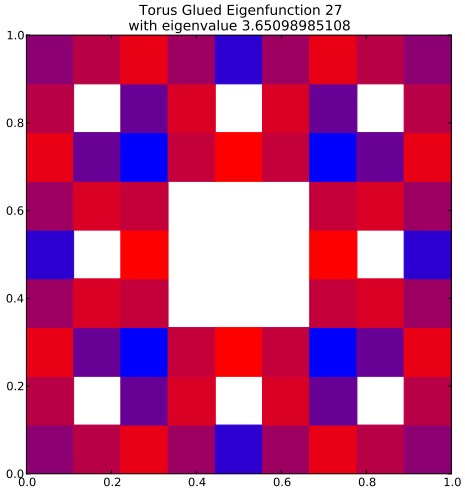
$M = 3$ Eigenfunction 22 has eigenvalue 0.676376542997





Compare to $m = 2$ eigenspace with eigenvalue 3.65098985108

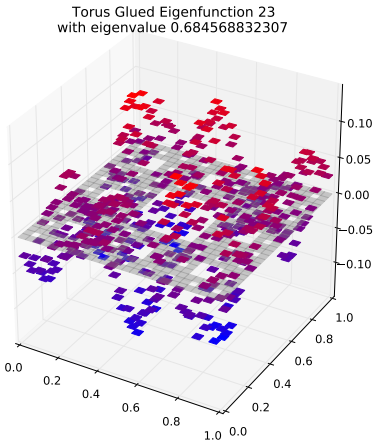


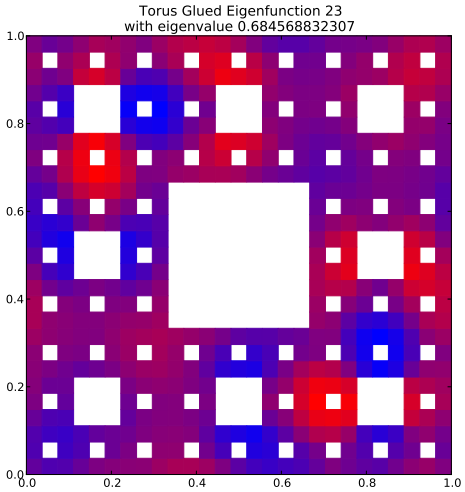


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.185258401307$
Dot Value: 0.11164533654344821

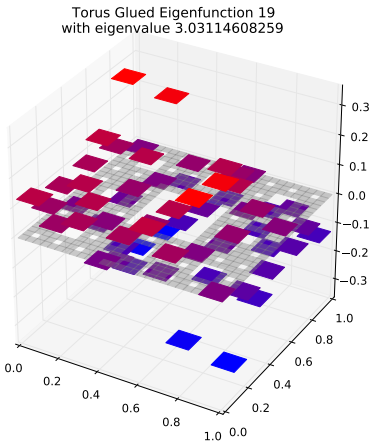
24 $M = 3$ Eigenfunction 23

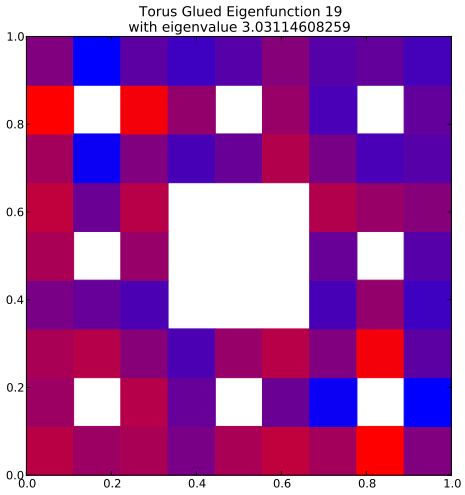
$M = 3$ Eigenfunction 23 has eigenvalue 0.684568832307





Compare to $m = 2$ eigenspace with eigenvalue 3.03114608259
(Note: Eigenspace Dimension > 1)

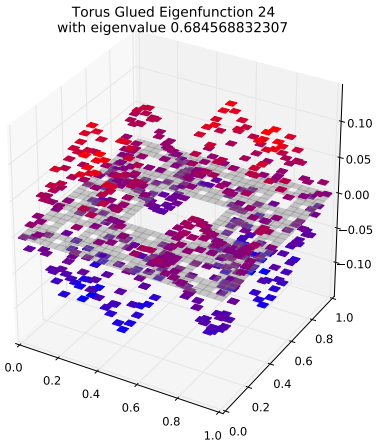


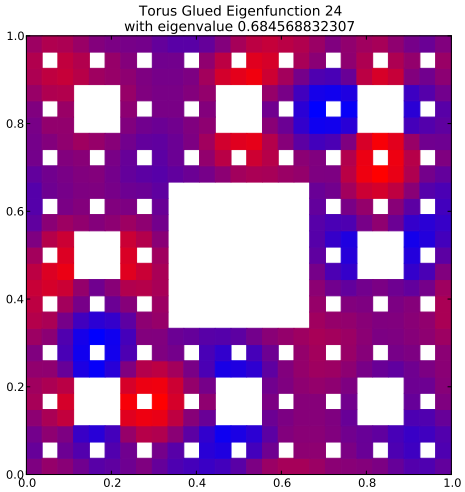


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.225844882976$
Dot Value: 0.21514801739009481

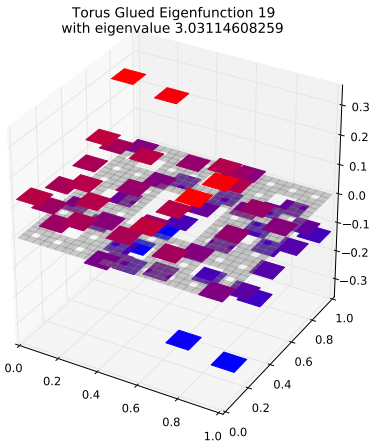
25 $M = 3$ Eigenfunction 24

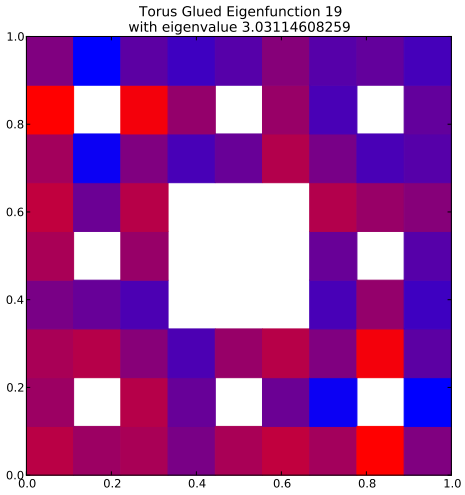
$M = 3$ Eigenfunction 24 has eigenvalue 0.684568832307





Compare to $m = 2$ eigenspace with eigenvalue 3.03114608259
(Note: Eigenspace Dimension > 1)

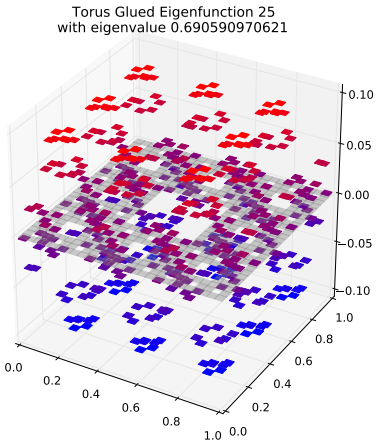


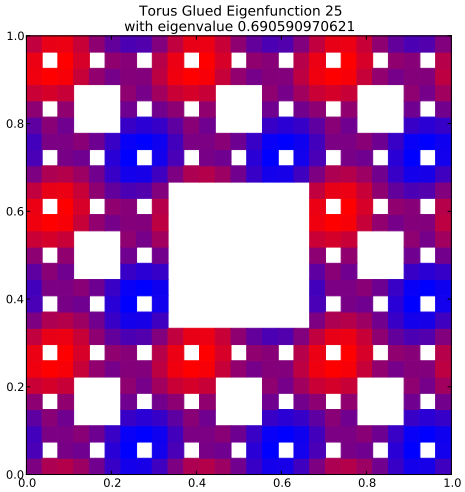


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.225844882976$
Dot Value: 0.21514801739009815

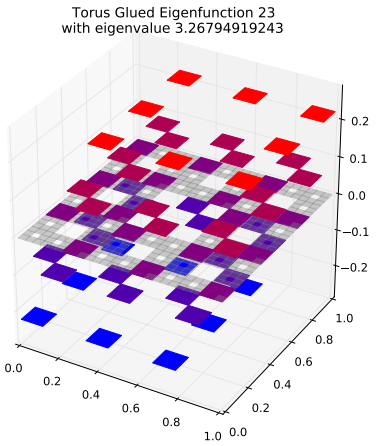
26 $M = 3$ Eigenfunction 25

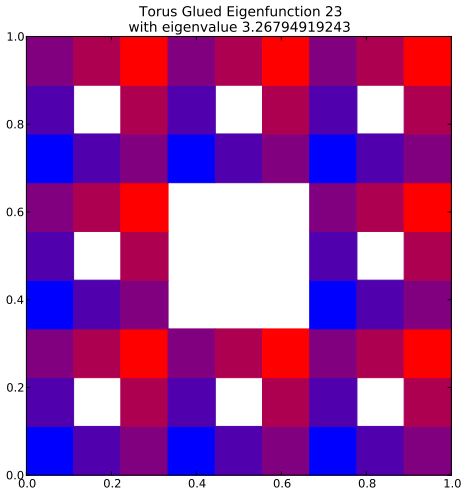
$M = 3$ Eigenfunction 25 has eigenvalue 0.690590970621





Compare to $m = 2$ eigenspace with eigenvalue 3.26794919243
(Note: Eigenspace Dimension > 1)

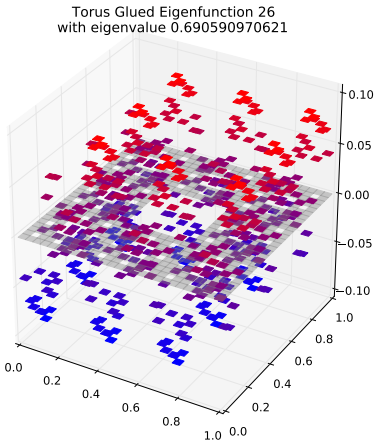


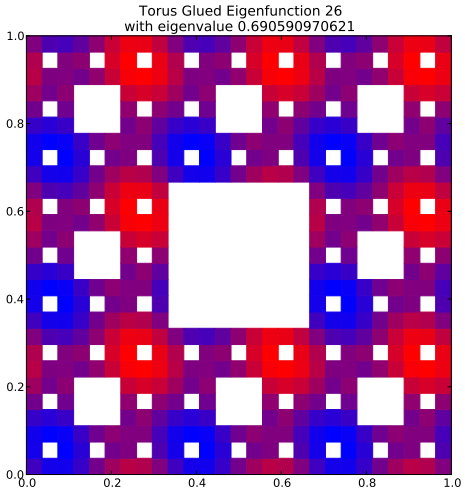


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.211322431885$
Dot Value: 0.0072084228188634 69

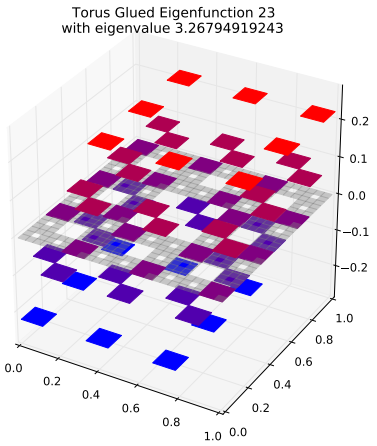
27 $M = 3$ Eigenfunction 26

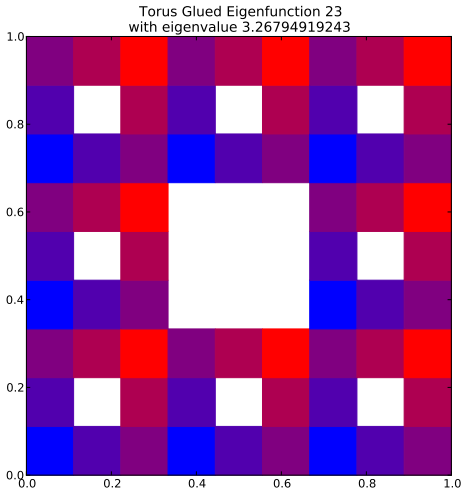
$M = 3$ Eigenfunction 26 has eigenvalue 0.690590970621





Compare to $m = 2$ eigenspace with eigenvalue 3.26794919243
(Note: Eigenspace Dimension > 1)

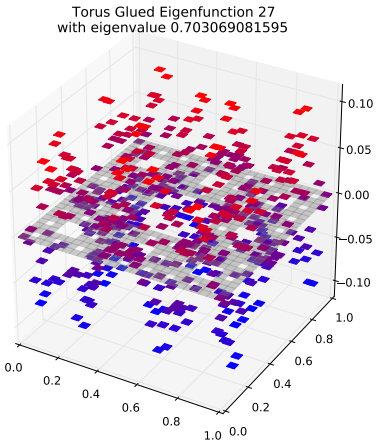


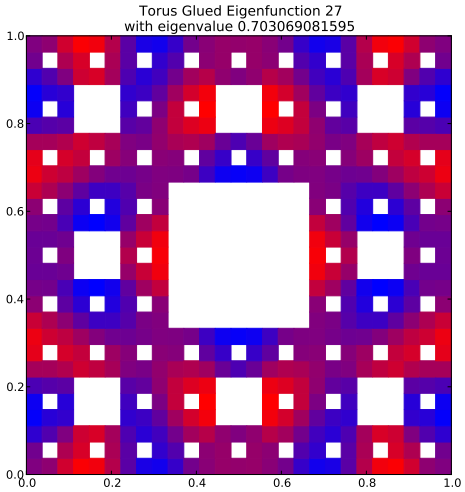


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.211322431885$
Dot Value: 0.0072084228188634 69

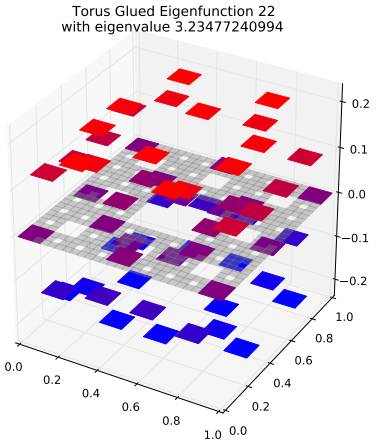
28 $M = 3$ Eigenfunction 27

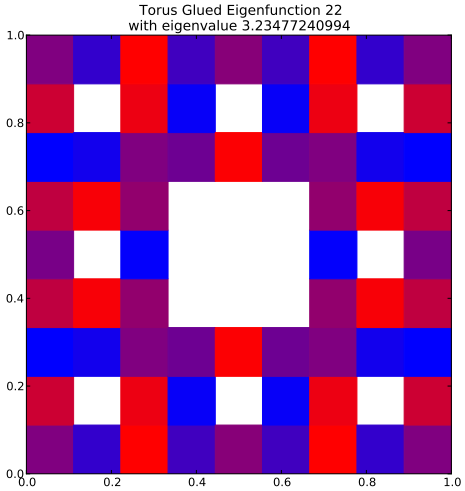
$M = 3$ Eigenfunction 27 has eigenvalue 0.703069081595





Compare to $m = 2$ eigenspace with eigenvalue 3.23477240994

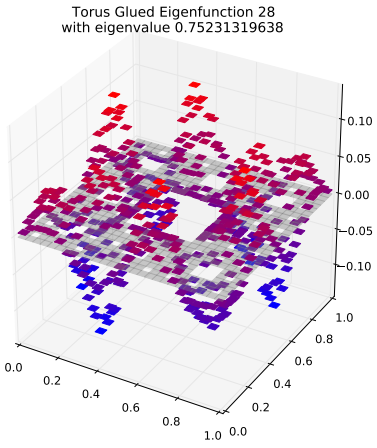


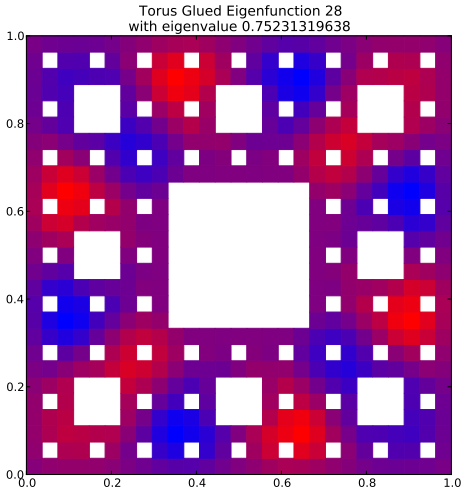


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.217347309948$
Dot Value: 0.09414370149475604

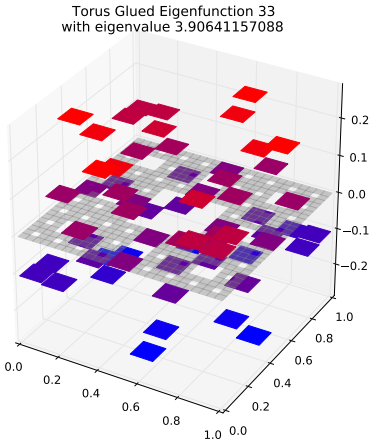
29 $M = 3$ Eigenfunction 28

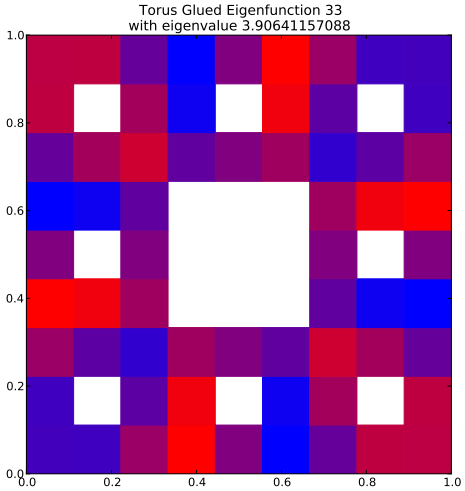
$M = 3$ Eigenfunction 28 has eigenvalue 0.75231319638





Compare to $m = 2$ eigenspace with eigenvalue 3.90641157088

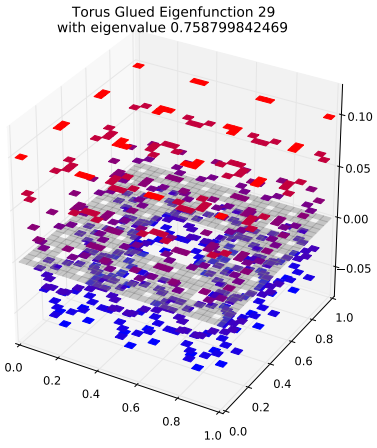


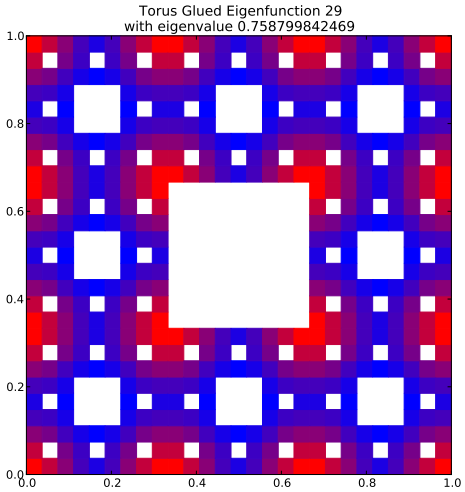


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.192584212577$
Dot Value: 0.04160711004409934

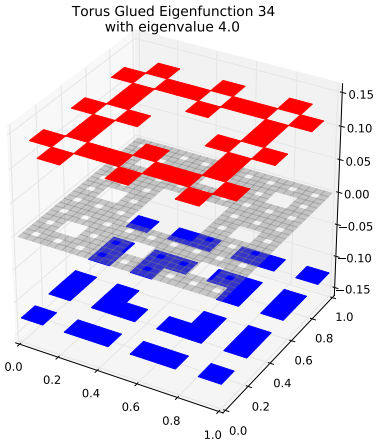
30 $M = 3$ Eigenfunction 29

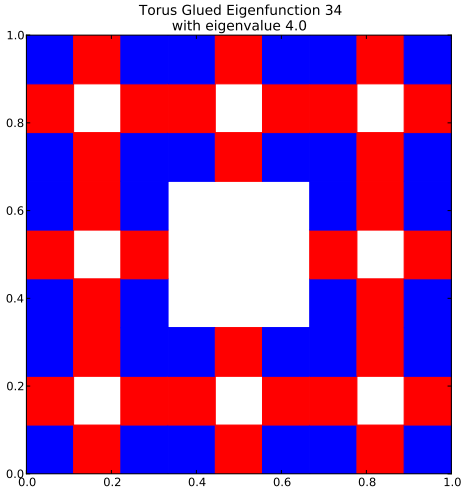
$M = 3$ Eigenfunction 29 has eigenvalue 0.758799842469





Compare to $m = 2$ eigenspace with eigenvalue 4.0

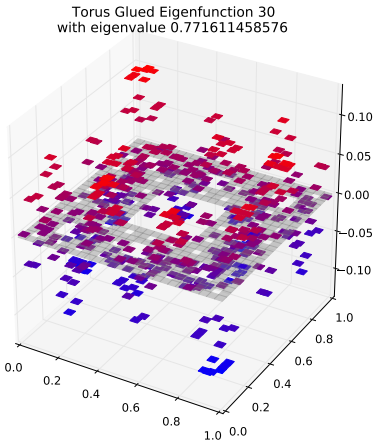


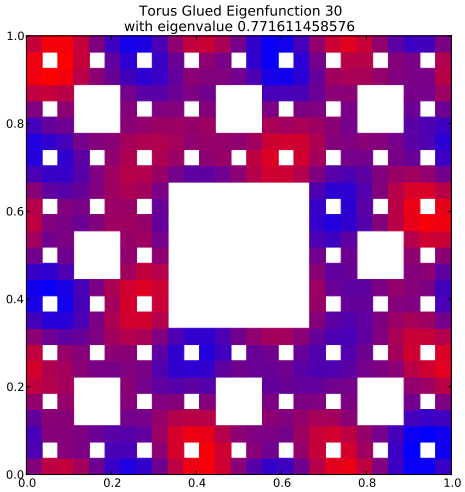


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.189699960617$
Dot Value: 2.220446049250313e-16

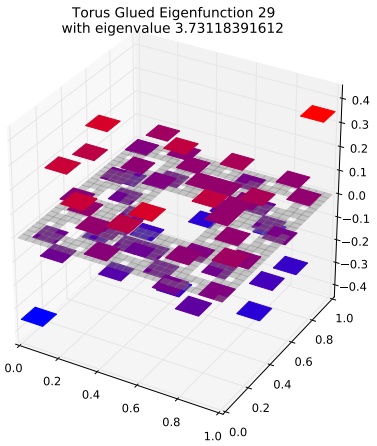
31 $M = 3$ Eigenfunction 30

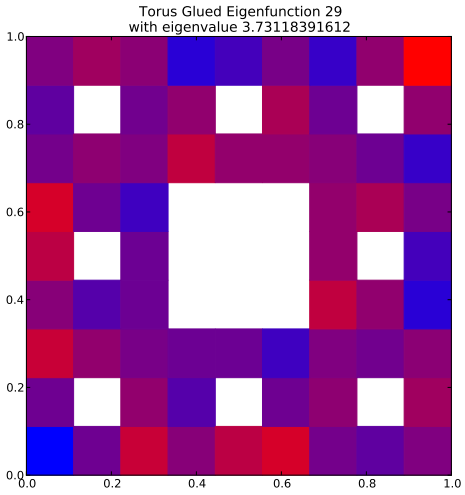
$M = 3$ Eigenfunction 30 has eigenvalue 0.771611458576





Compare to $m = 2$ eigenspace with eigenvalue 3.73118391612
(Note: Eigenspace Dimension > 1)

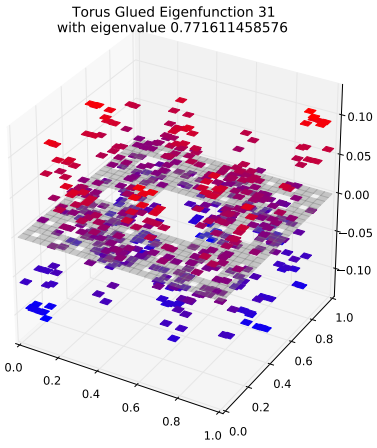


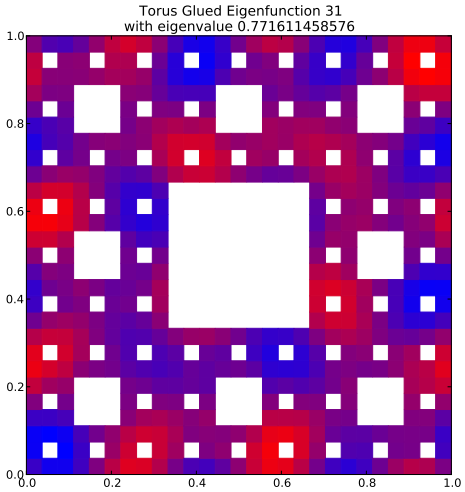


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.206800703456$
Dot Value: 0.08688381031666326

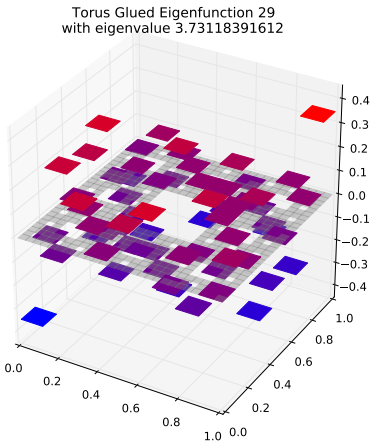
32 $M = 3$ Eigenfunction 31

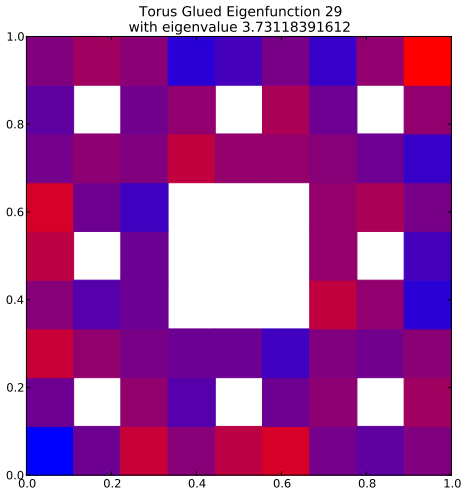
$M = 3$ Eigenfunction 31 has eigenvalue 0.771611458576





Compare to $m = 2$ eigenspace with eigenvalue 3.73118391612
(Note: Eigenspace Dimension > 1)

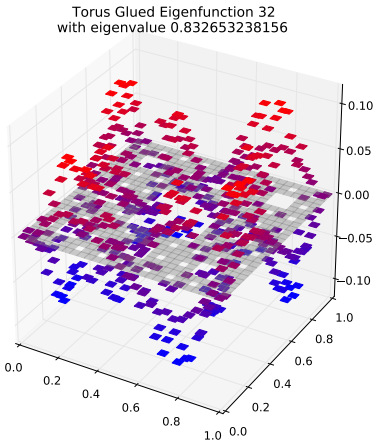


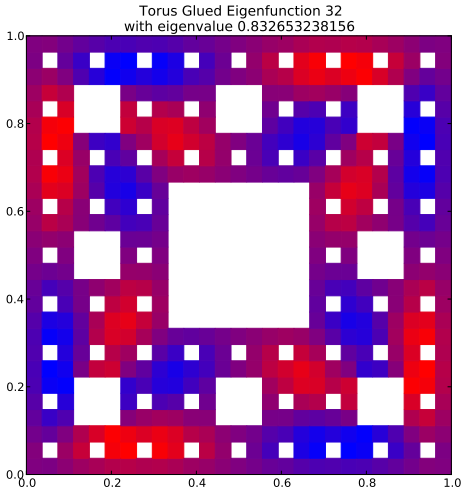


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.206800703456$
Dot Value: 0.08688381031666315

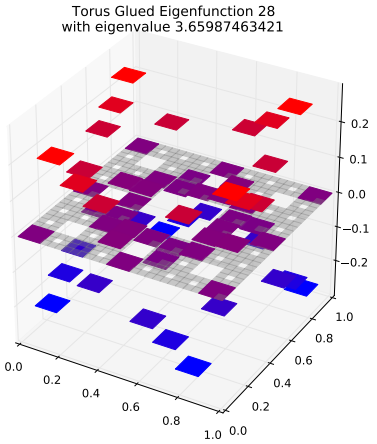
33 $M = 3$ Eigenfunction 32

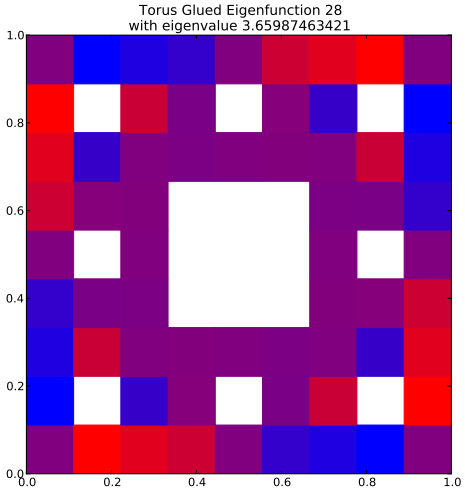
$M = 3$ Eigenfunction 32 has eigenvalue 0.832653238156





Compare to $m = 2$ eigenspace with eigenvalue 3.65987463421

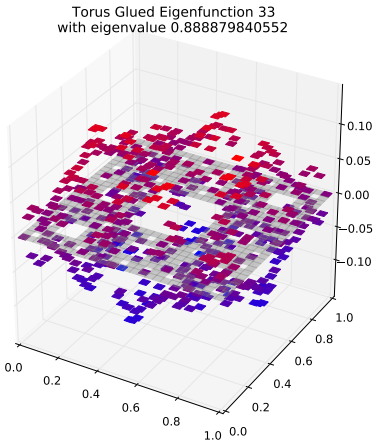


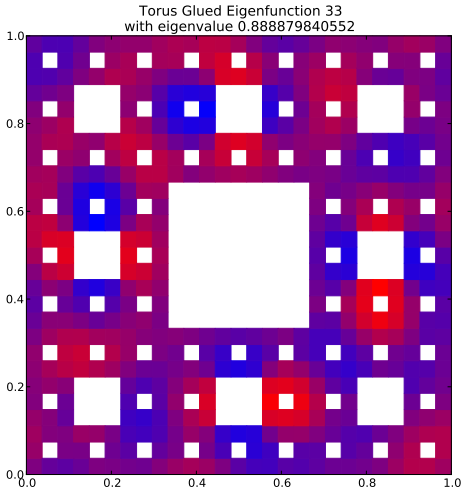


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.227508677585$
Dot Value: 0.13296595339252149

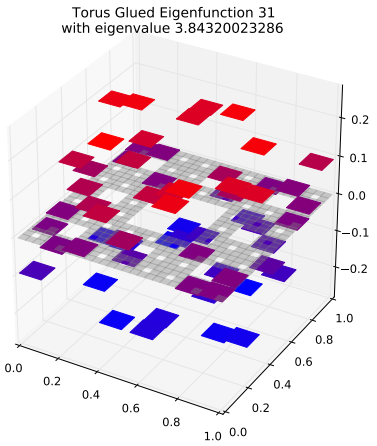
34 $M = 3$ Eigenfunction 33

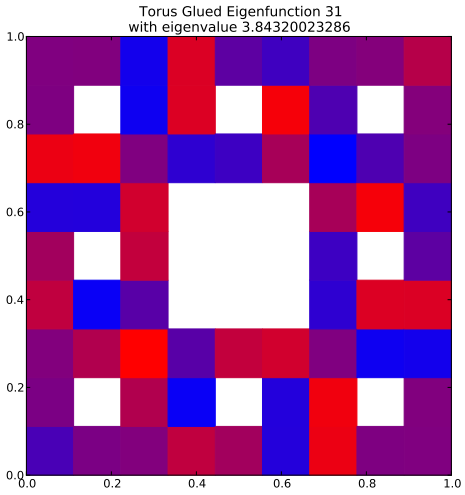
$M = 3$ Eigenfunction 33 has eigenvalue 0.888879840552





Compare to $m = 2$ eigenspace with eigenvalue 3.84320023286
(Note: Eigenspace Dimension > 1)

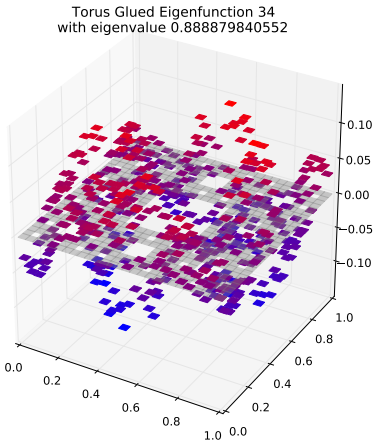


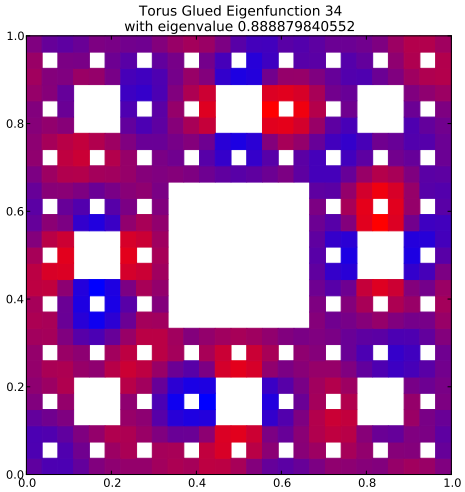


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.231286372475$
Dot Value: 0.19119663186931746

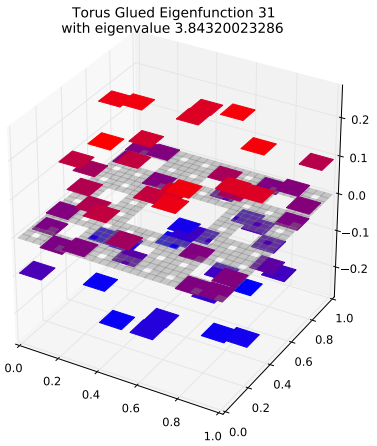
35 $M = 3$ Eigenfunction 34

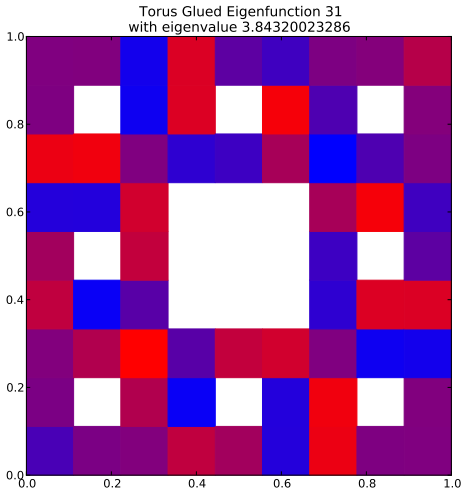
$M = 3$ Eigenfunction 34 has eigenvalue 0.888879840552





Compare to $m = 2$ eigenspace with eigenvalue 3.84320023286
(Note: Eigenspace Dimension > 1)

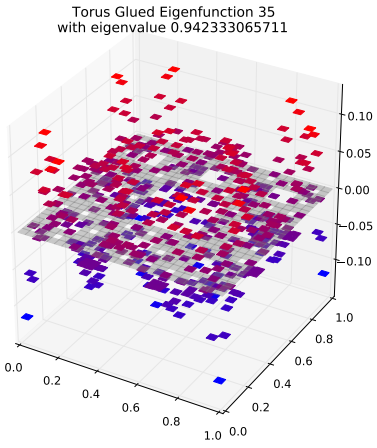


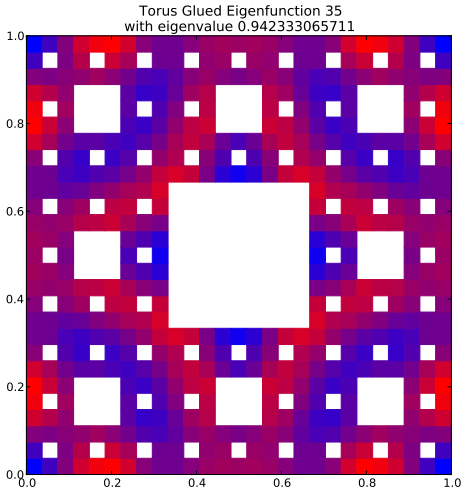


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.231286372475$
Dot Value: 0.1911966318693178

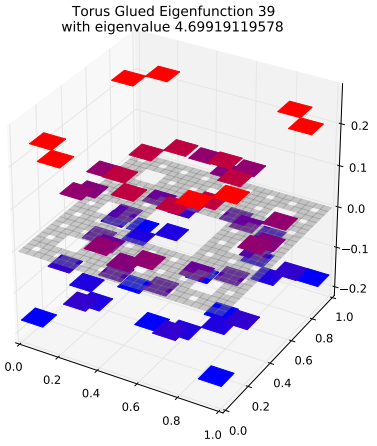
36 $M = 3$ Eigenfunction 35

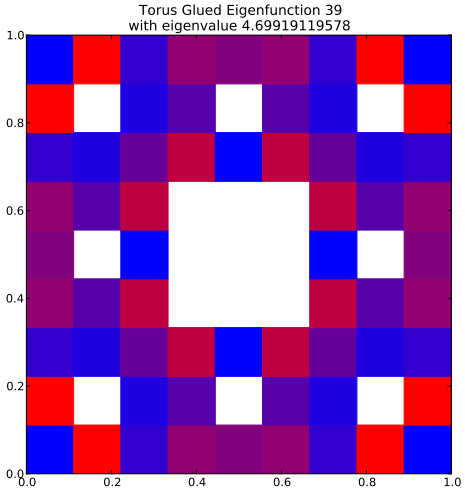
$M = 3$ Eigenfunction 35 has eigenvalue 0.942333065711





Compare to $m = 2$ eigenspace with eigenvalue 4.69919119578

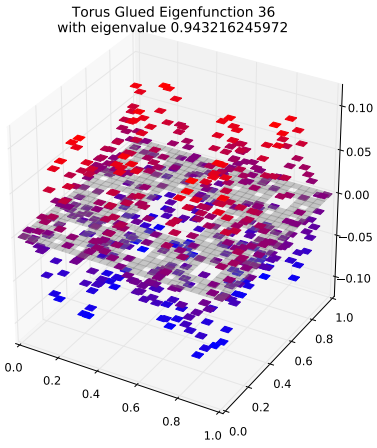


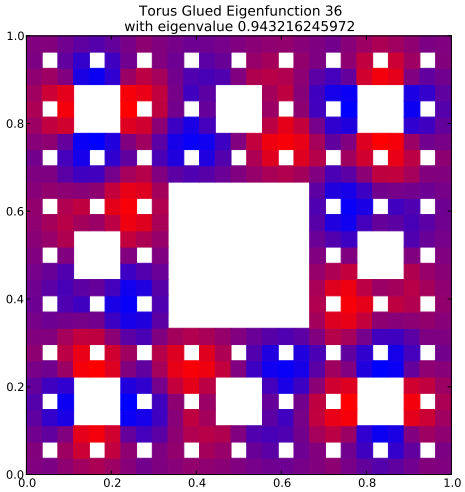


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.200530905522$
Dot Value: 0.1356552069159137

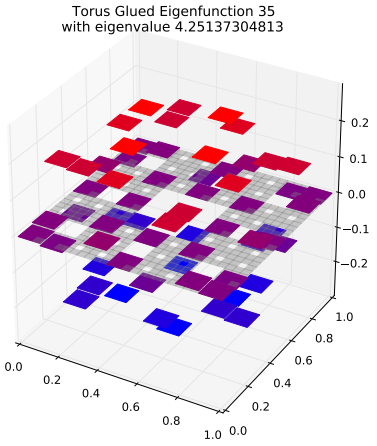
37 $M = 3$ Eigenfunction 36

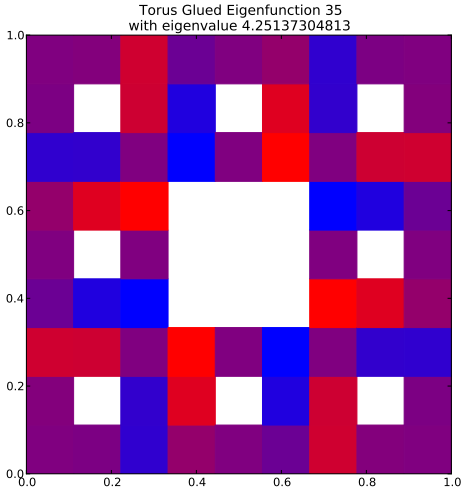
$M = 3$ Eigenfunction 36 has eigenvalue 0.943216245972





Compare to $m = 2$ eigenspace with eigenvalue 4.25137304813

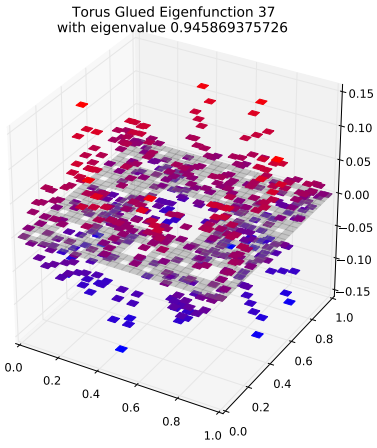


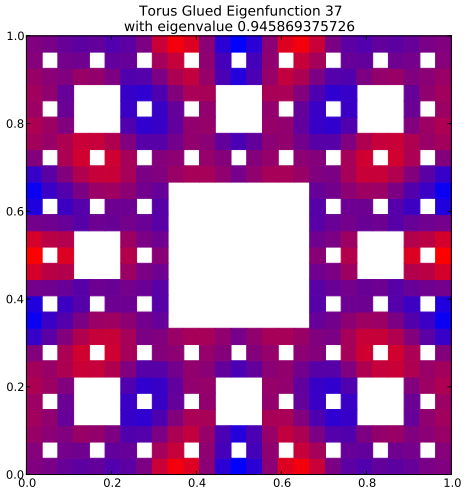


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2218615575$
Dot Value: 0.2007061238296961

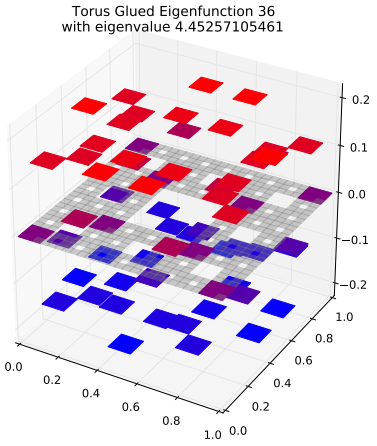
38 $M = 3$ Eigenfunction 37

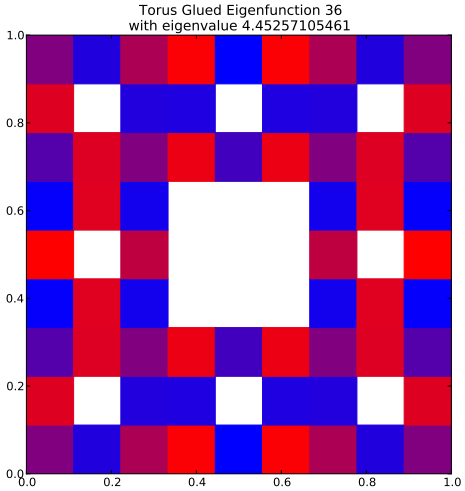
$M = 3$ Eigenfunction 37 has eigenvalue 0.945869375726





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

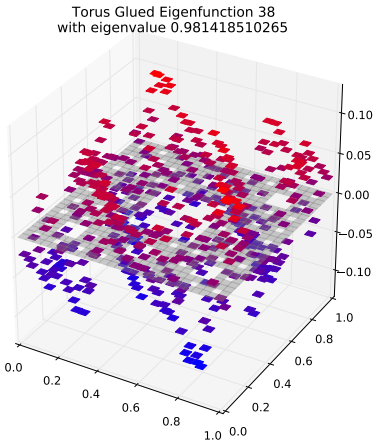


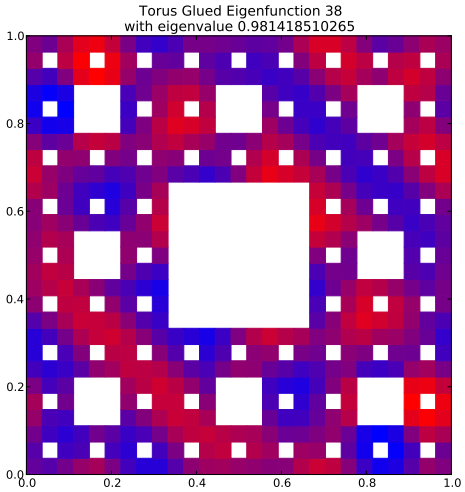


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.212432179998$
Dot Value: 0.2532504421684575

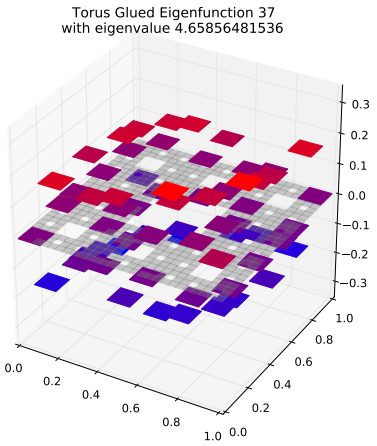
39 $M = 3$ Eigenfunction 38

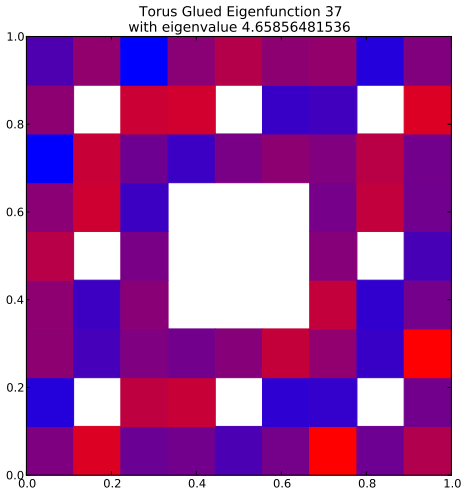
$M = 3$ Eigenfunction 38 has eigenvalue 0.981418510265





Compare to $m = 2$ eigenspace with eigenvalue 4.65856481536
(Note: Eigenspace Dimension > 1)

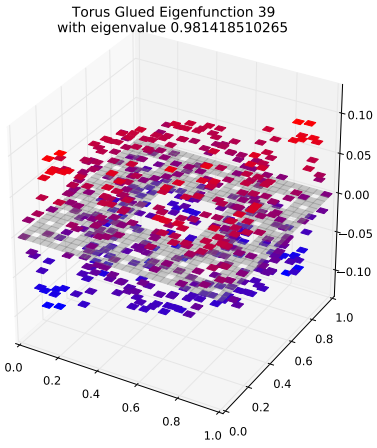


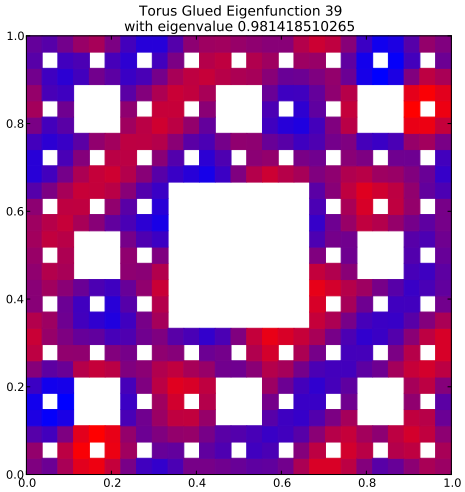


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.210669712489$
Dot Value: 0.14912272891031464

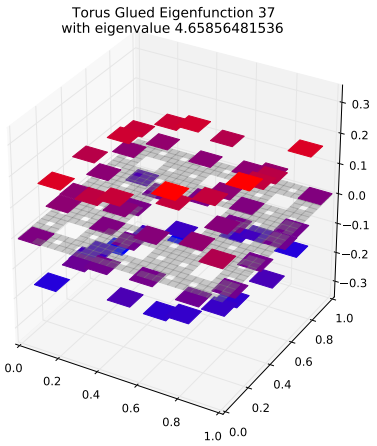
40 $M = 3$ Eigenfunction 39

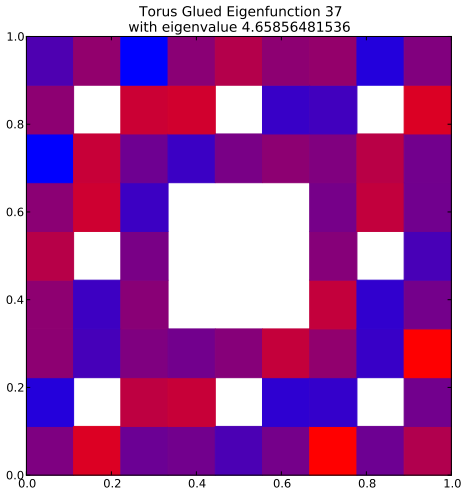
$M = 3$ Eigenfunction 39 has eigenvalue 0.981418510265





Compare to $m = 2$ eigenspace with eigenvalue 4.65856481536
(Note: Eigenspace Dimension > 1)

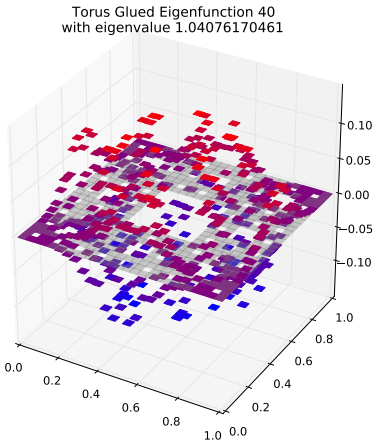


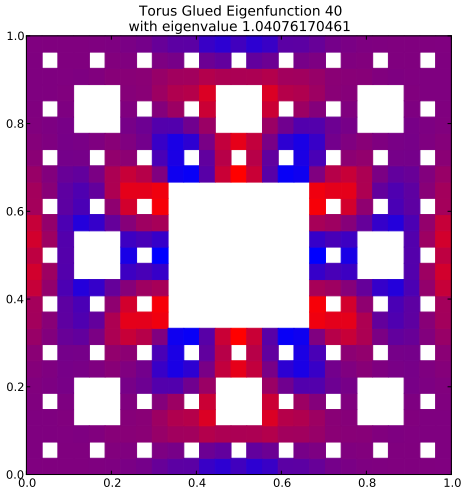


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.210669712489$
Dot Value: 0.14912272891031475

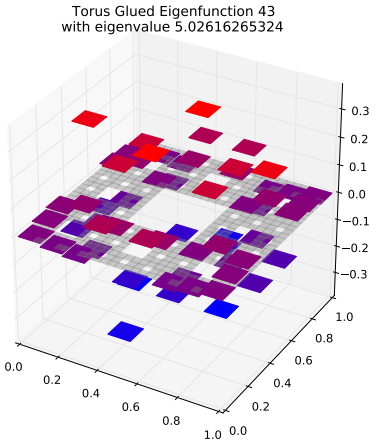
41 $M = 3$ Eigenfunction 40

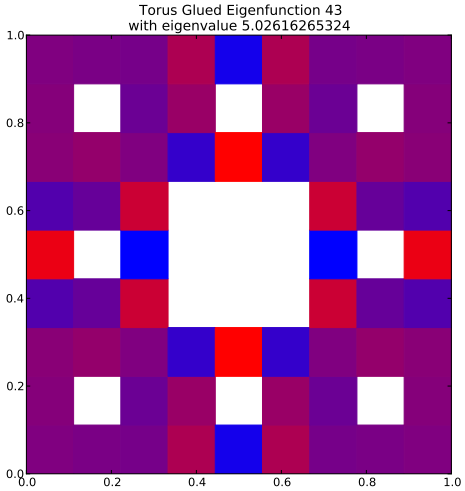
$M = 3$ Eigenfunction 40 has eigenvalue 1.04076170461





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

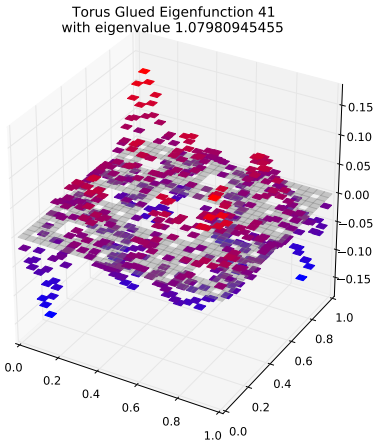


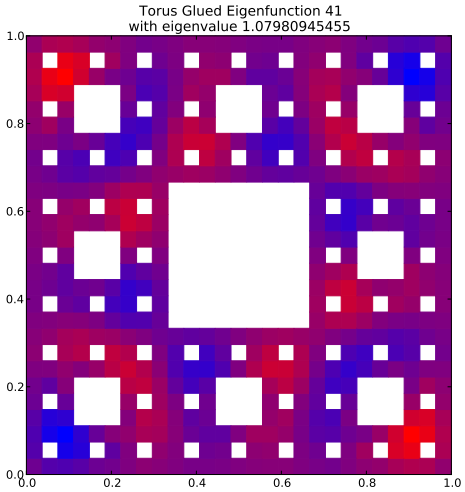


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.207068846836$
Dot Value: 0.1895316388037156

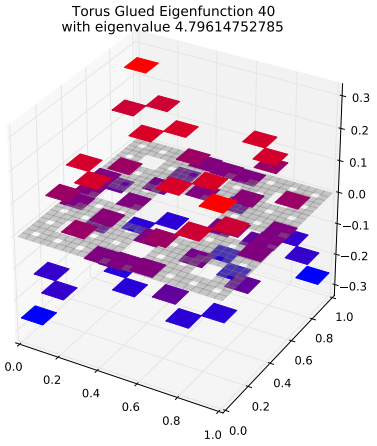
42 $M = 3$ Eigenfunction 41

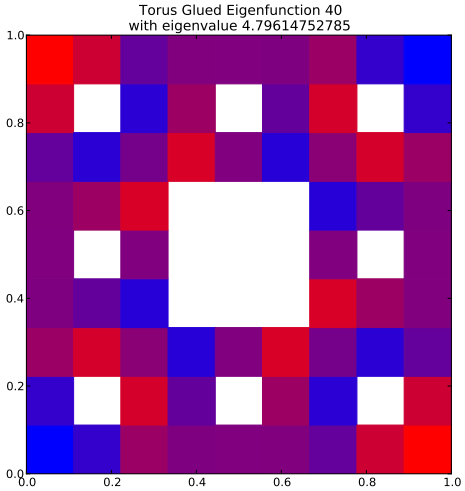
$M = 3$ Eigenfunction 41 has eigenvalue 1.07980945455





Compare to $m = 2$ eigenspace with eigenvalue 4.79614752785

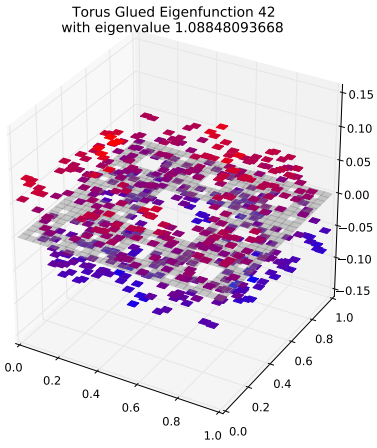


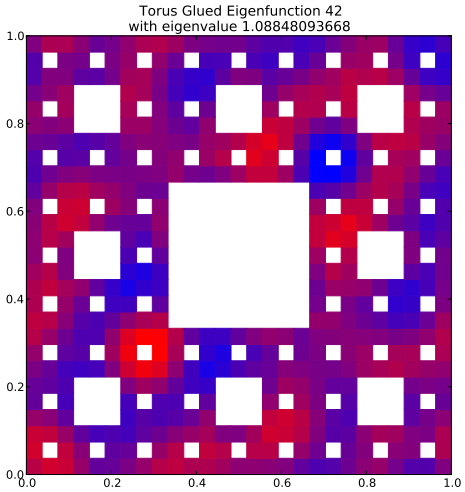


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.22514100083$
Dot Value: 0.021455528622870923

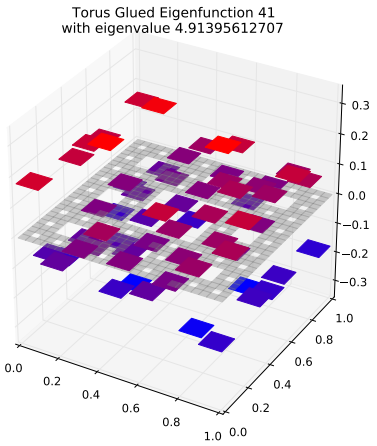
43 $M = 3$ Eigenfunction 42

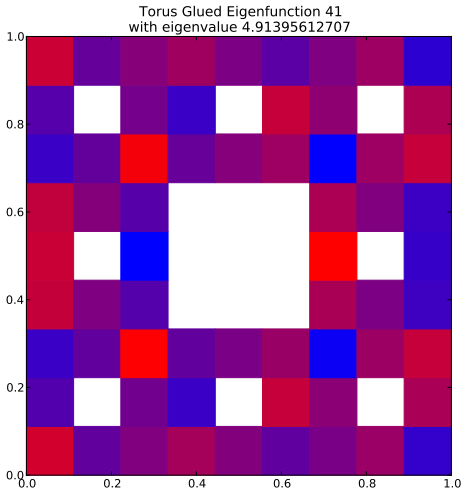
$M = 3$ Eigenfunction 42 has eigenvalue 1.08848093668





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

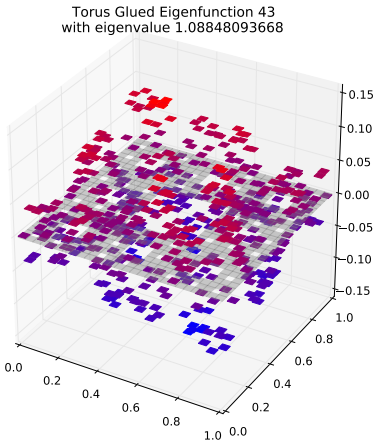


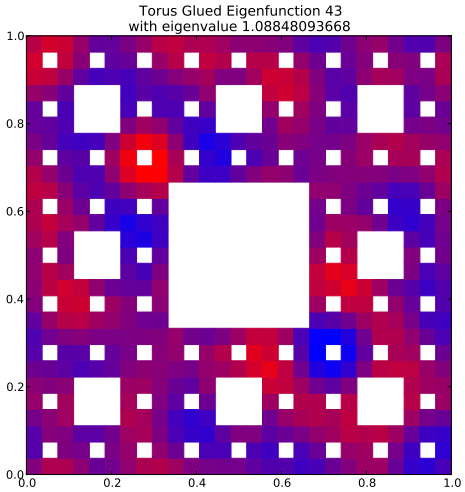


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.221508069778$
Dot Value: 0.04753936739267817

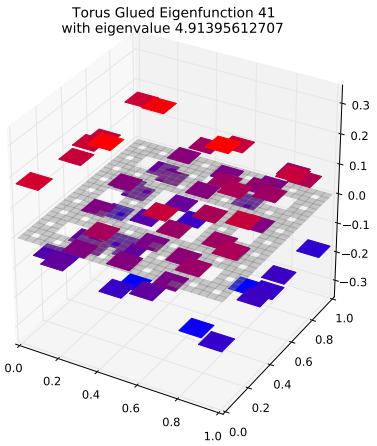
44 $M = 3$ Eigenfunction 43

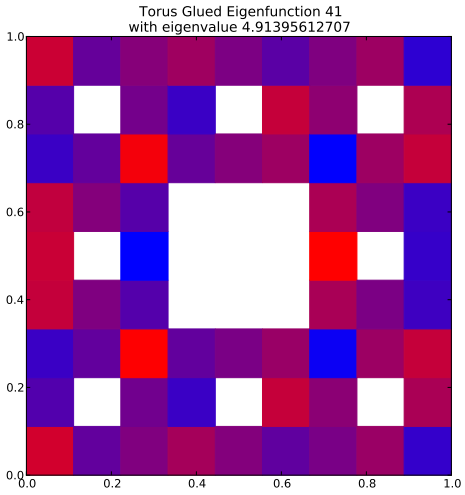
$M = 3$ Eigenfunction 43 has eigenvalue 1.08848093668





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

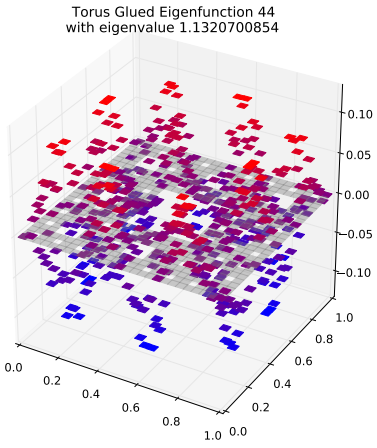


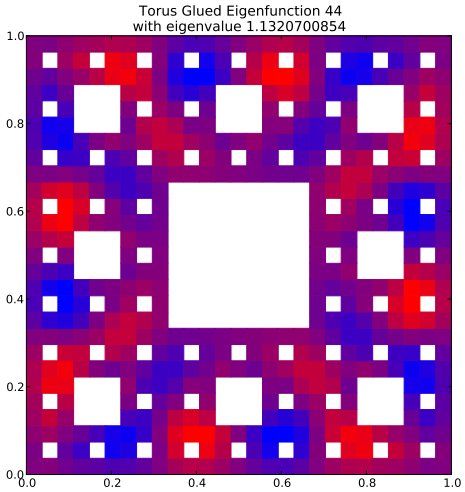


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.221508069778$
Dot Value: 0.04753936739267994

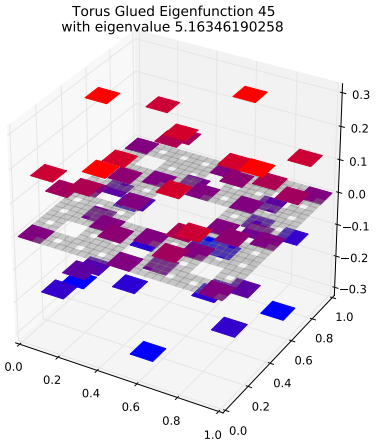
45 $M = 3$ Eigenfunction 44

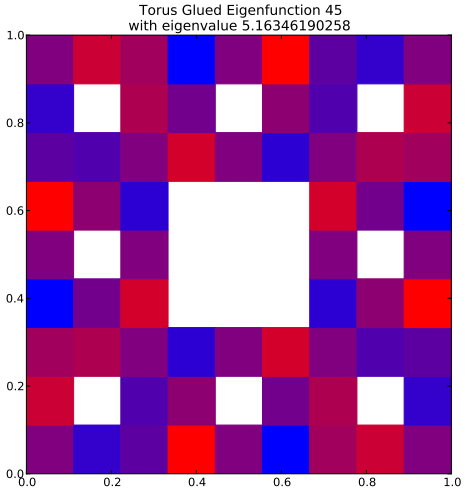
$M = 3$ Eigenfunction 44 has eigenvalue 1.1320700854





Compare to $m = 2$ eigenspace with eigenvalue 5.16346190258

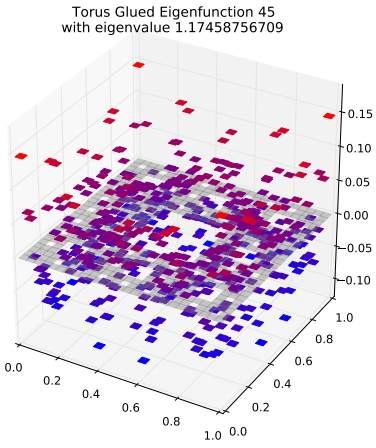


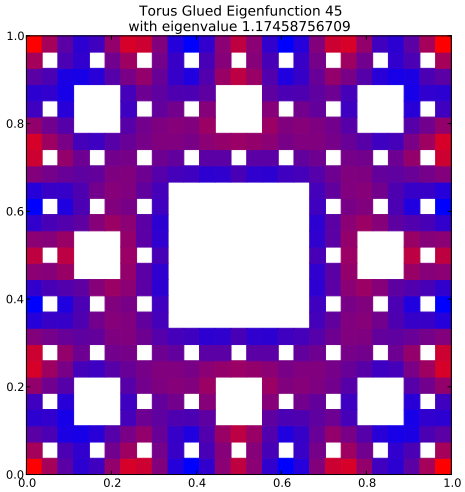


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.21924633255$
Dot Value: 0.05002080551582844

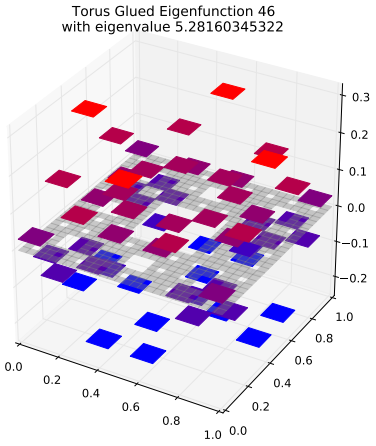
46 $M = 3$ Eigenfunction 45

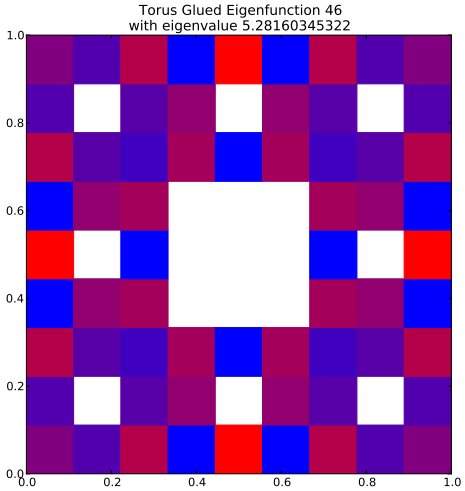
$M = 3$ Eigenfunction 45 has eigenvalue 1.17458756709





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

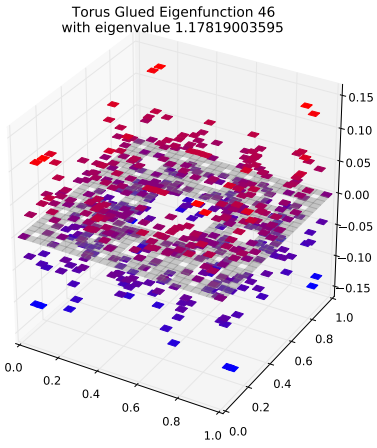


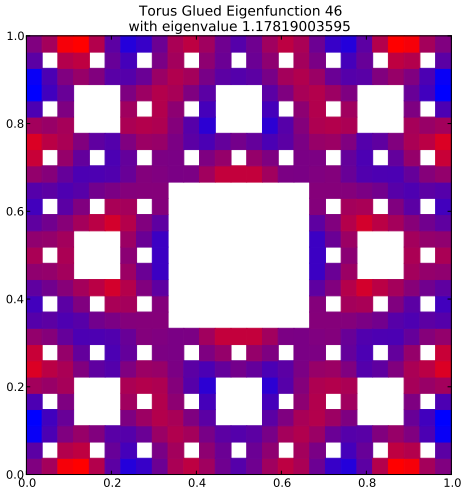


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.222392229462$
Dot Value: 0.21601224910660233

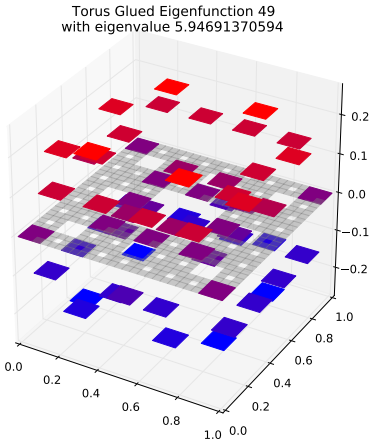
47 $M = 3$ Eigenfunction 46

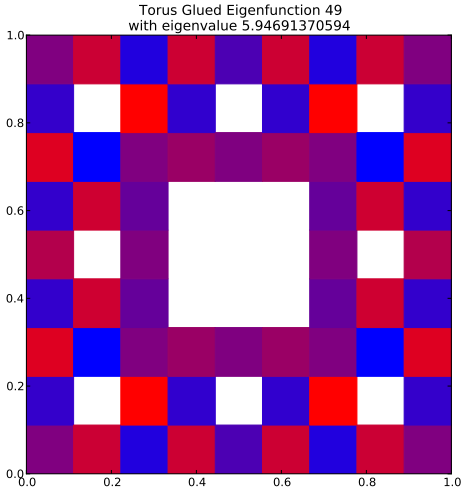
$M = 3$ Eigenfunction 46 has eigenvalue 1.17819003595





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

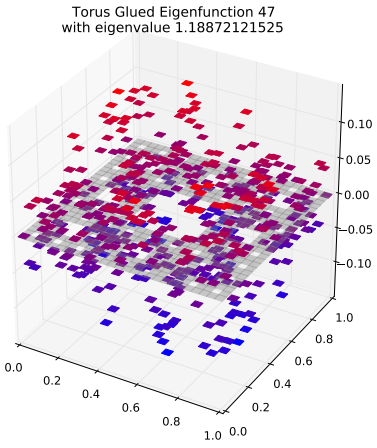


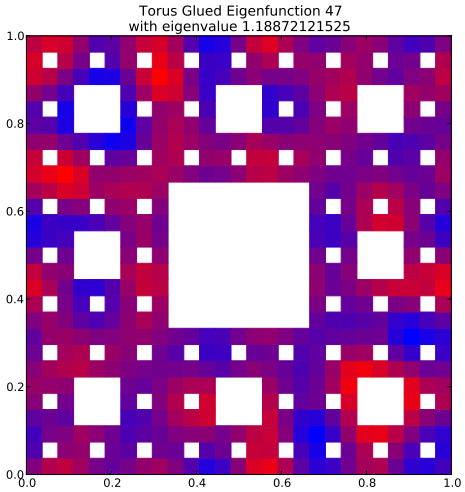


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.198117896814$
Dot Value: 0.0777456721277694

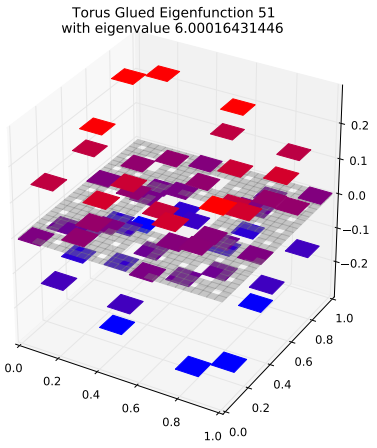
48 $M = 3$ Eigenfunction 47

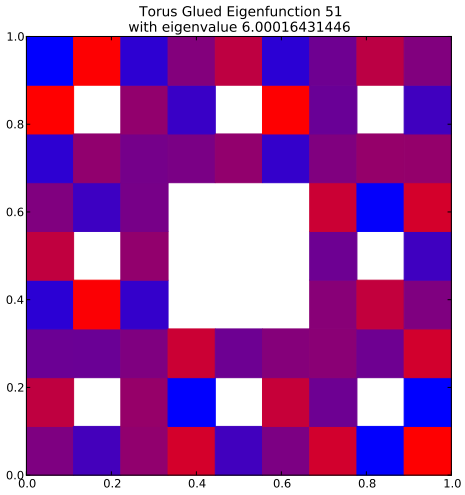
$M = 3$ Eigenfunction 47 has eigenvalue 1.18872121525





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

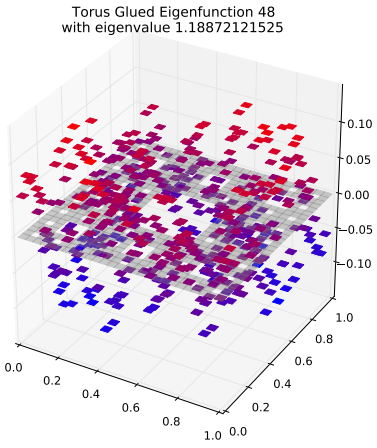


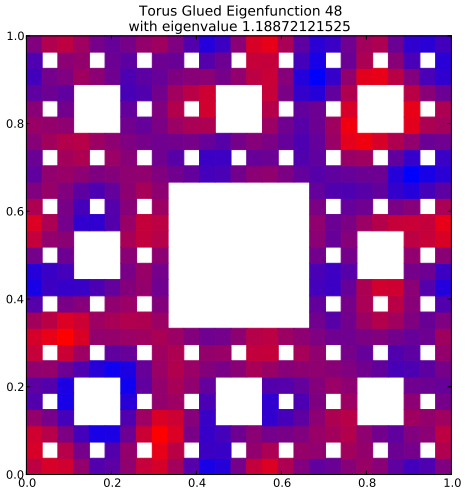


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.198114777022$
Dot Value: 0.1405915402398772

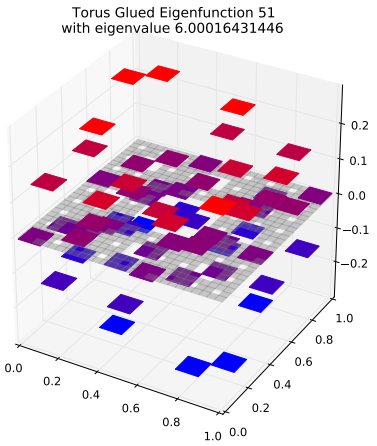
49 $M = 3$ Eigenfunction 48

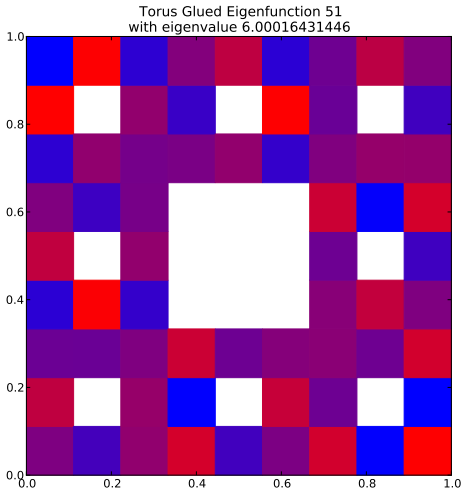
$M = 3$ Eigenfunction 48 has eigenvalue 1.18872121525





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

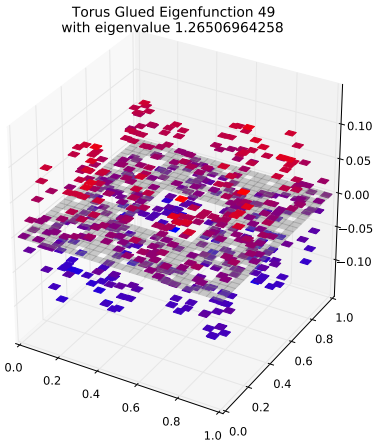


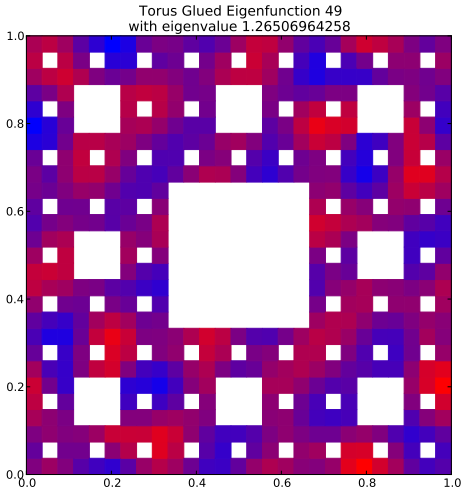


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.198114777022$
Dot Value: 0.1405915402398772

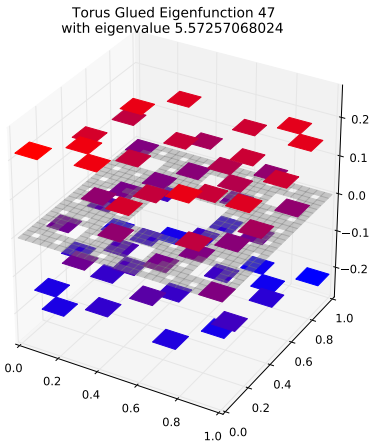
50 $M = 3$ Eigenfunction 49

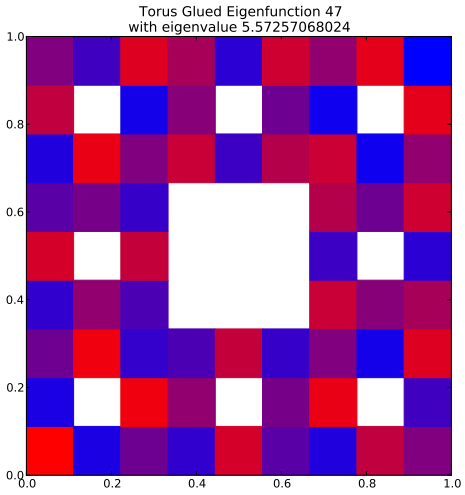
$M = 3$ Eigenfunction 49 has eigenvalue 1.26506964258





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

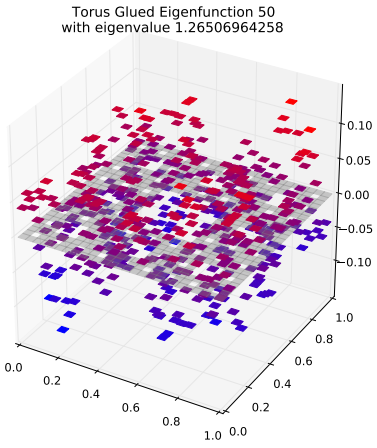


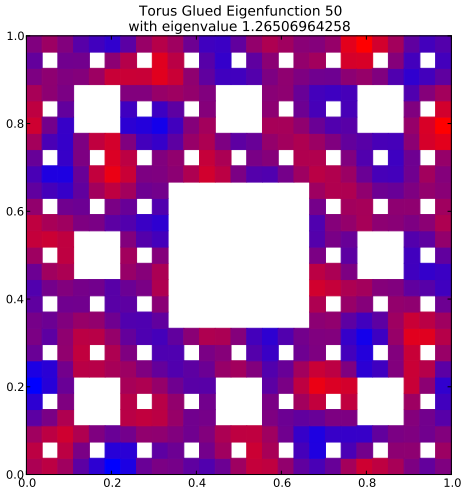


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.227017244853$
Dot Value: 0.08778470355655521

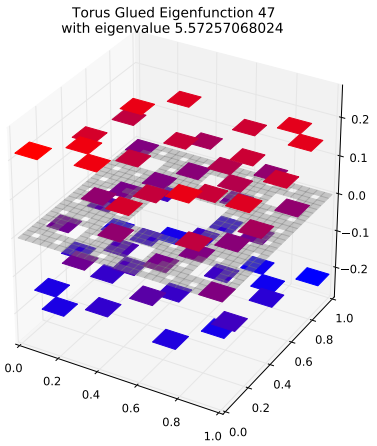
51 $M = 3$ Eigenfunction 50

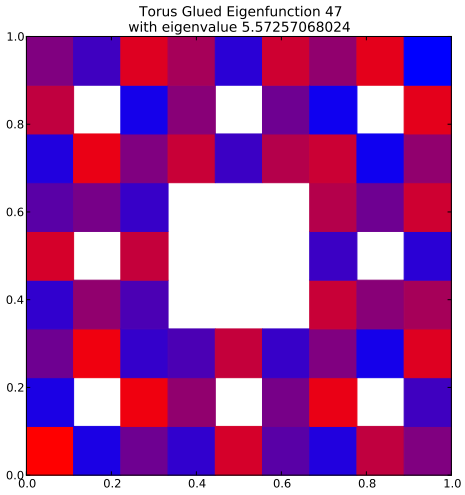
$M = 3$ Eigenfunction 50 has eigenvalue 1.26506964258





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

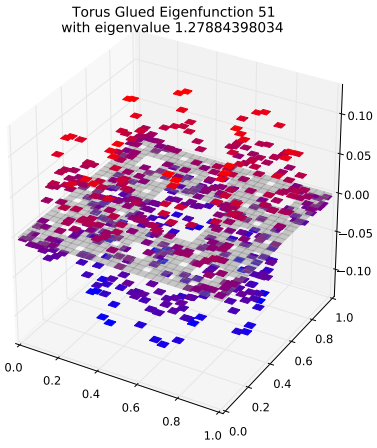


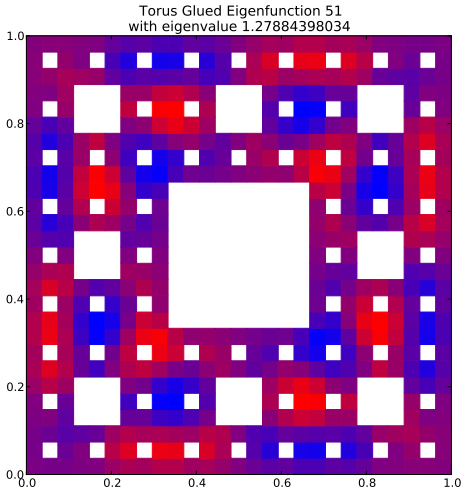


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.227017244853$
Dot Value: 0.08778470355655277

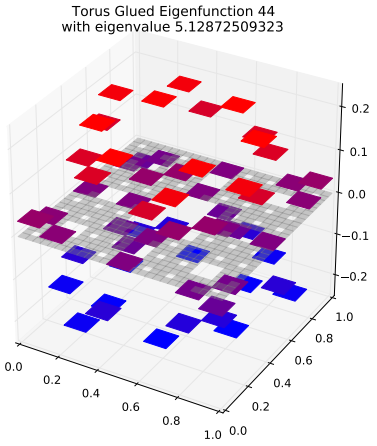
52 $M = 3$ Eigenfunction 51

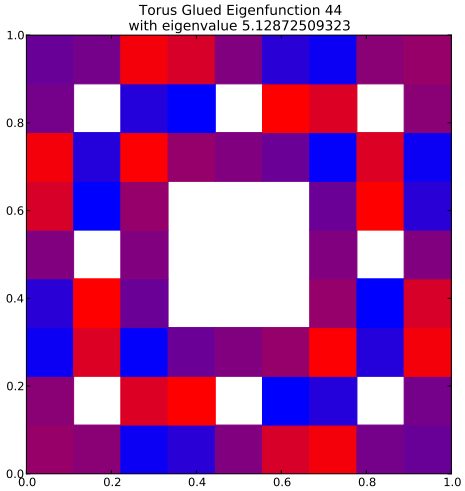
$M = 3$ Eigenfunction 51 has eigenvalue 1.27884398034





Compare to $m = 2$ eigenspace with eigenvalue 5.12872509323

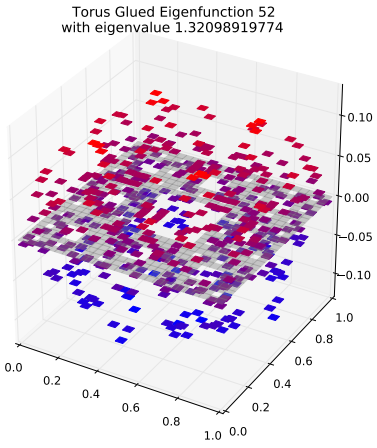


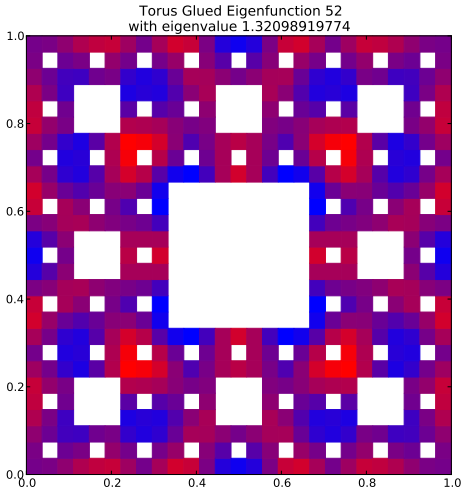


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.249349293849$
Dot Value: 0.013670569702209812

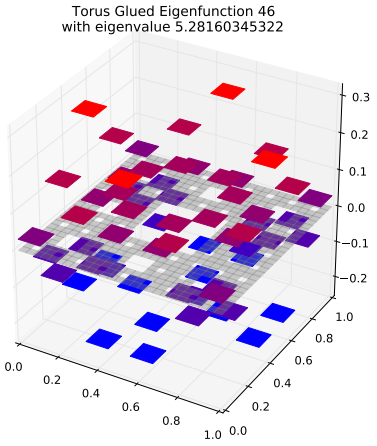
53 $M = 3$ Eigenfunction 52

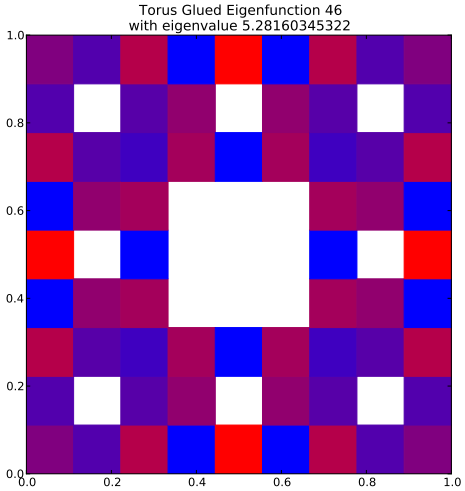
$M = 3$ Eigenfunction 52 has eigenvalue 1.32098919774





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

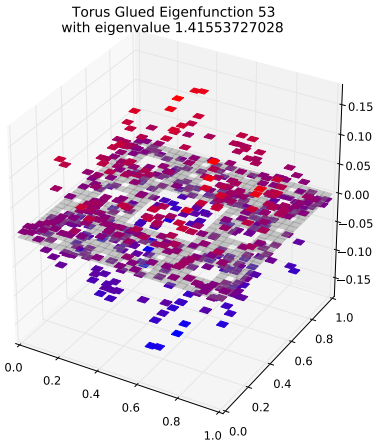


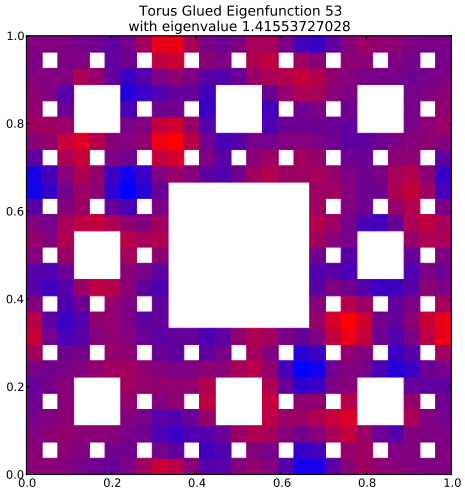


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.250111393147$
Dot Value: 0.23660096511950057

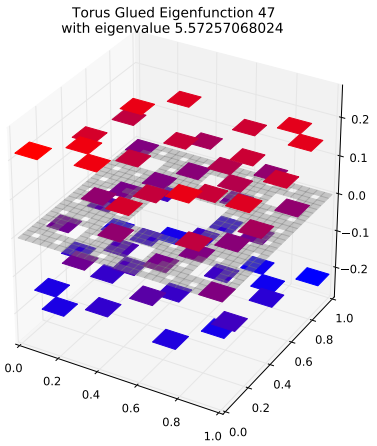
54 $M = 3$ Eigenfunction 53

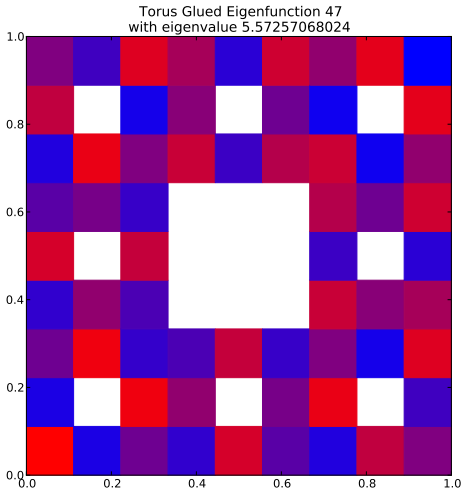
$M = 3$ Eigenfunction 53 has eigenvalue 1.41553727028





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

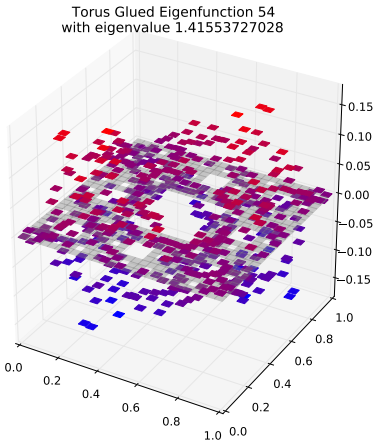


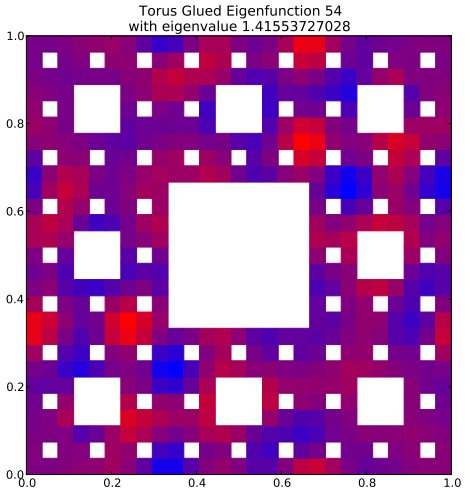


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.254018719817$
Dot Value: 0.32610062451893007

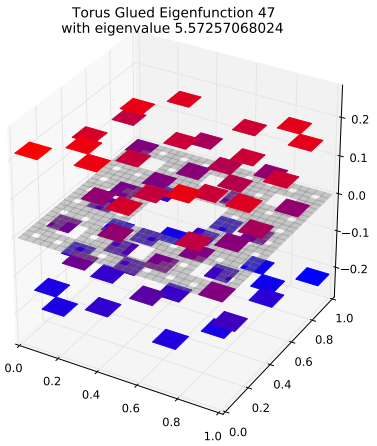
55 $M = 3$ Eigenfunction 54

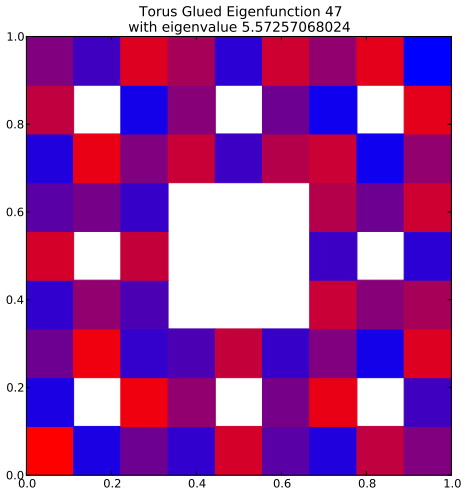
$M = 3$ Eigenfunction 54 has eigenvalue 1.41553727028





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

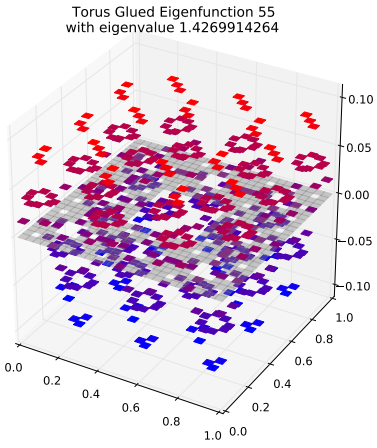


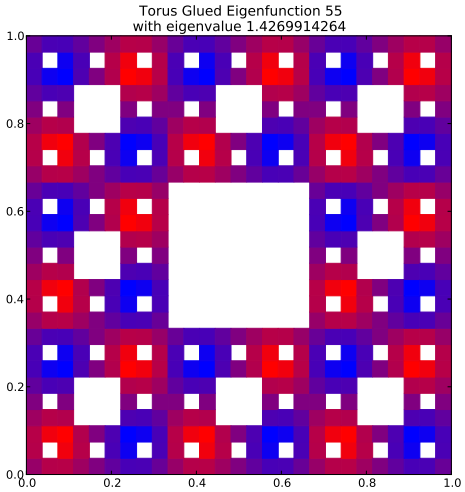


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.254018719817$
Dot Value: 0.32610062451891986

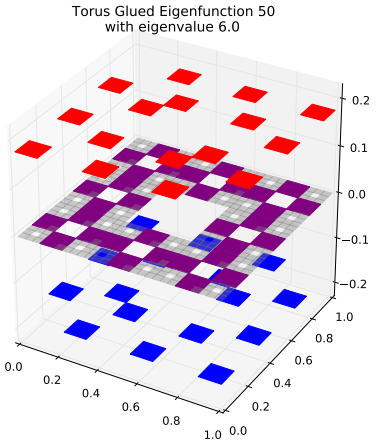
56 $M = 3$ Eigenfunction 55

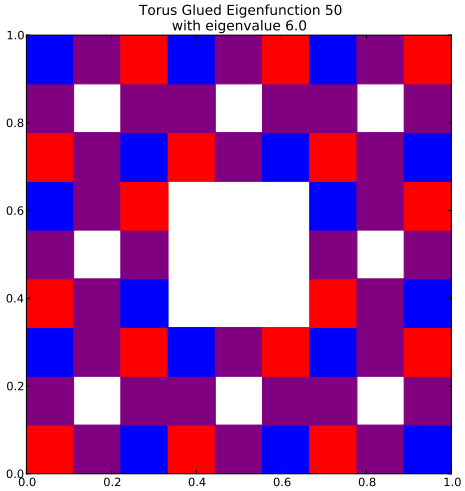
$M = 3$ Eigenfunction 55 has eigenvalue 1.4269914264





Compare to $m = 2$ eigenspace with eigenvalue 6.0

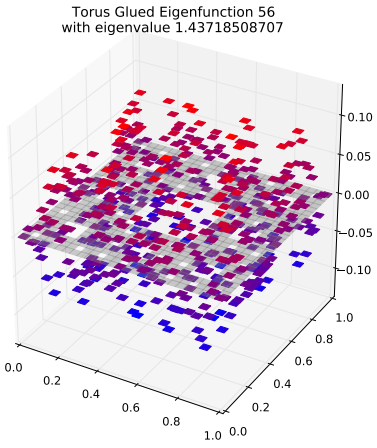


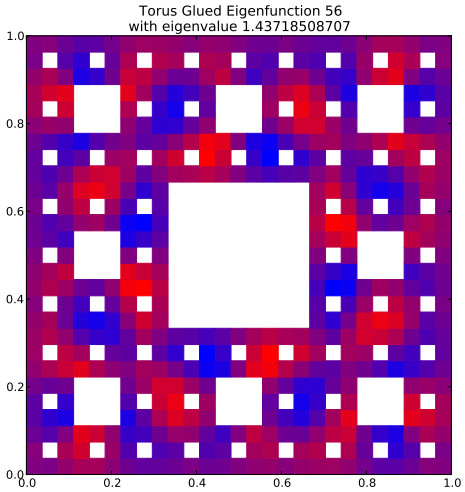


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237831904401$
Dot Value: 0.0

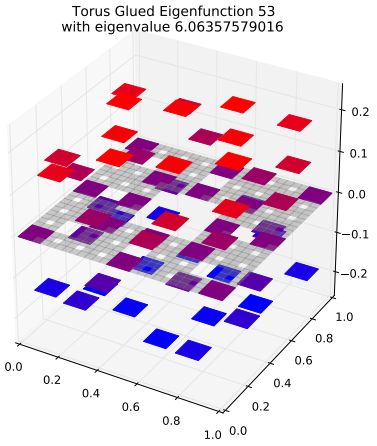
57 $M = 3$ Eigenfunction 56

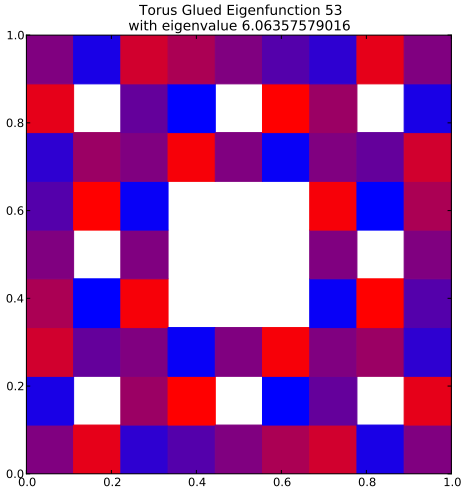
$M = 3$ Eigenfunction 56 has eigenvalue 1.43718508707





Compare to $m = 2$ eigenspace with eigenvalue 6.06357579016

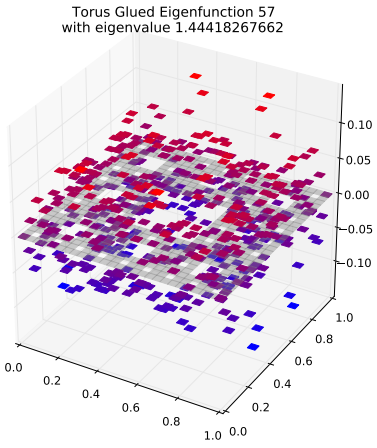


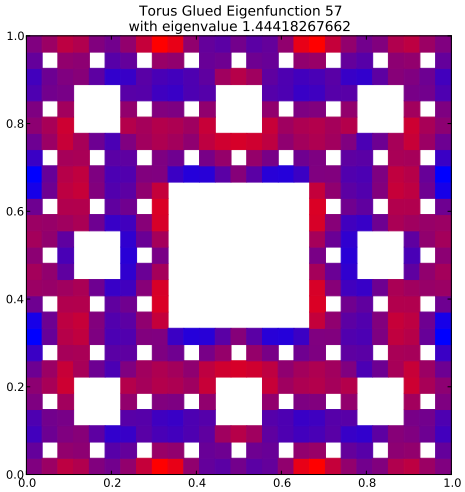


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237019398586$
Dot Value: 0.01290626341264356

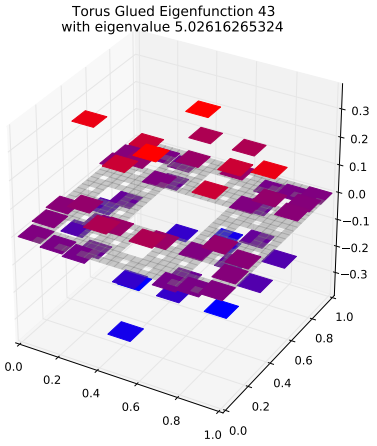
58 $M = 3$ Eigenfunction 57

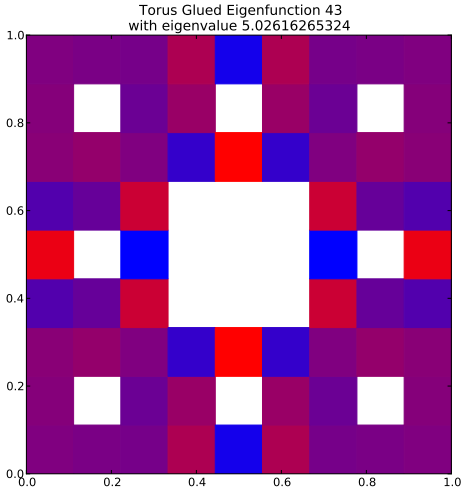
$M = 3$ Eigenfunction 57 has eigenvalue 1.44418267662





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

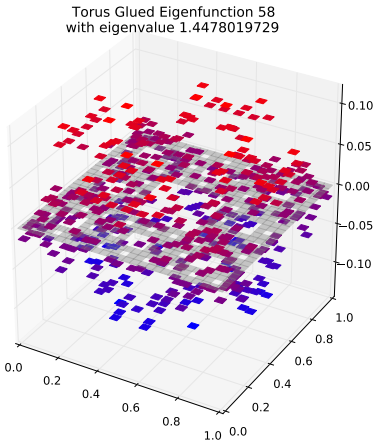


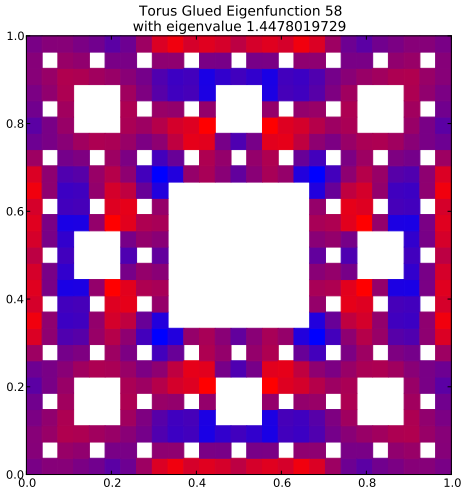


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2873330563$
Dot Value: 0.3890103035159026

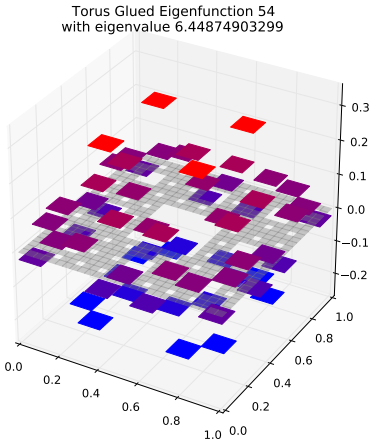
59 $M = 3$ Eigenfunction 58

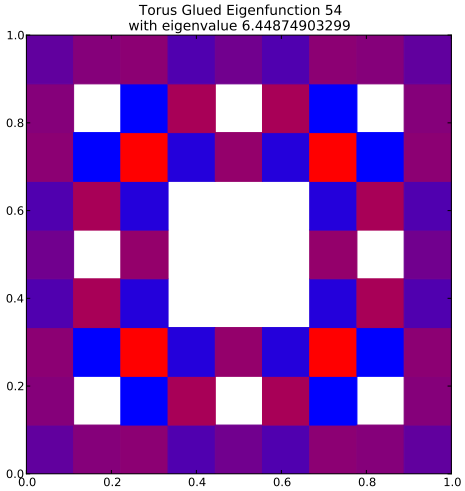
$M = 3$ Eigenfunction 58 has eigenvalue 1.4478019729





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

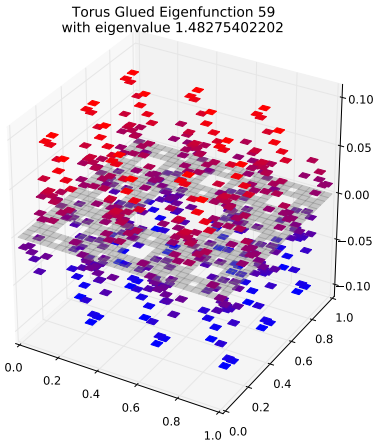


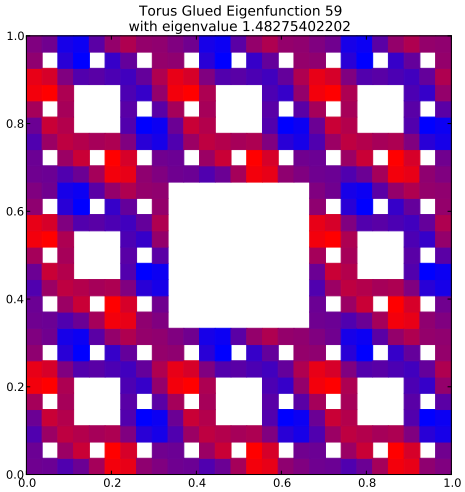


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.224508965304$
Dot Value: 0.2021774508230667

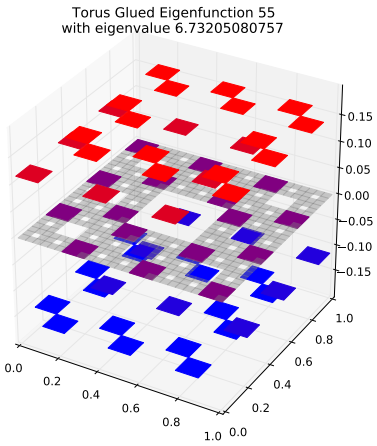
60 $M = 3$ Eigenfunction 59

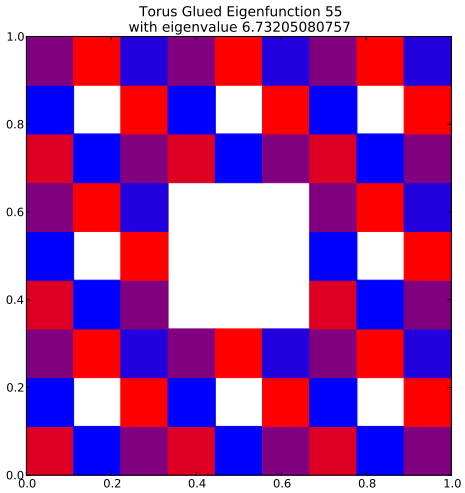
$M = 3$ Eigenfunction 59 has eigenvalue 1.48275402202





Compare to $m = 2$ eigenspace with eigenvalue 6.73205080757
(Note: Eigenspace Dimension > 1)

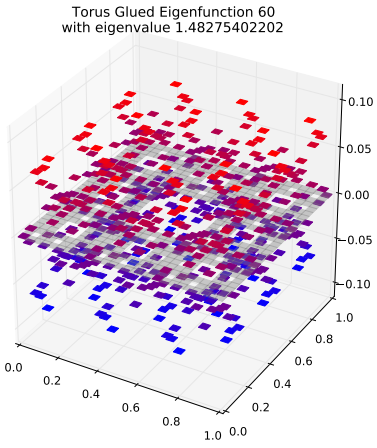


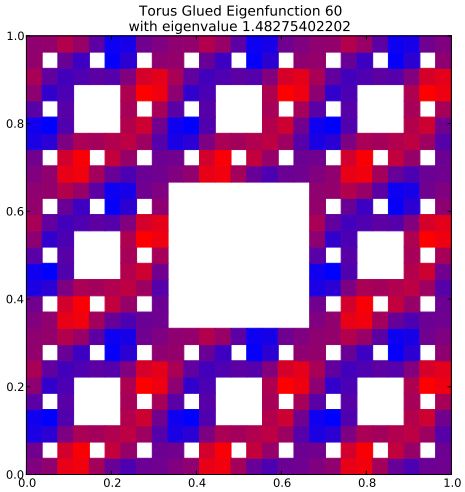


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.220252945856$
Dot Value: 0.08916117818499336

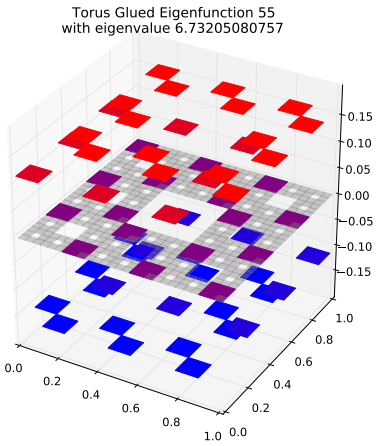
61 $M = 3$ Eigenfunction 60

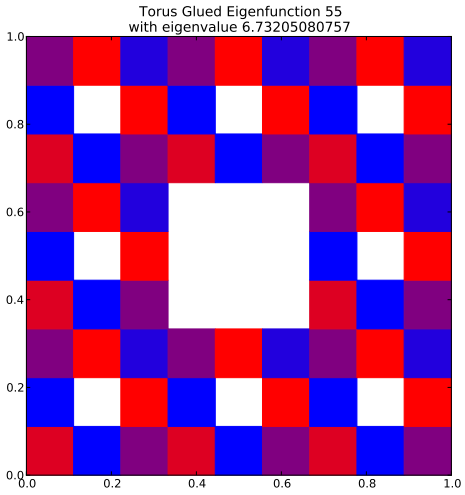
$M = 3$ Eigenfunction 60 has eigenvalue 1.48275402202





Compare to $m = 2$ eigenspace with eigenvalue 6.73205080757
(Note: Eigenspace Dimension > 1)

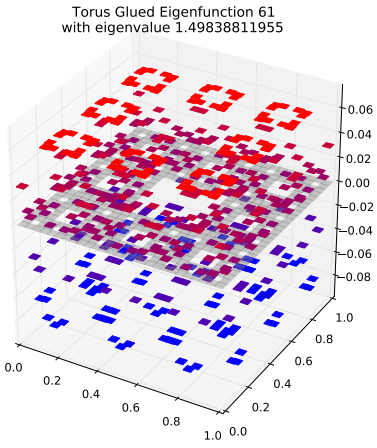


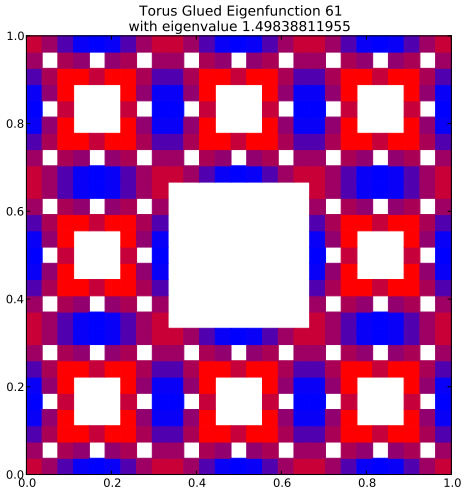


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.220252945856$
Dot Value: 0.08916117818499225

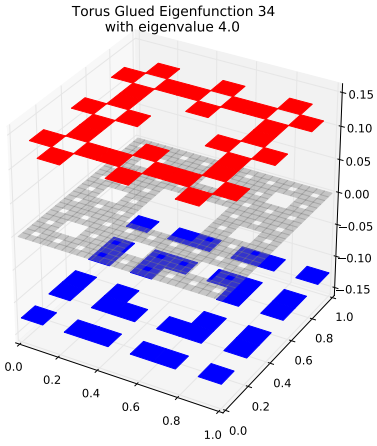
62 $M = 3$ Eigenfunction 61

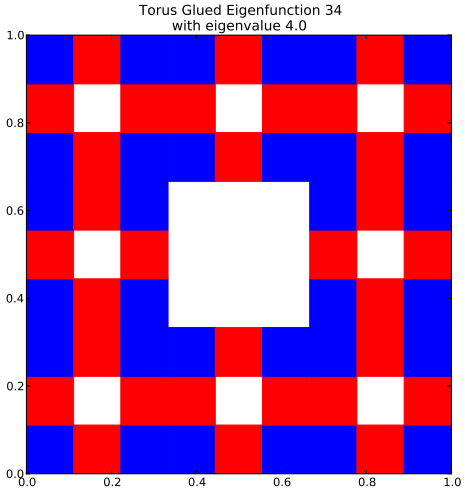
$M = 3$ Eigenfunction 61 has eigenvalue 1.49838811955





Compare to $m = 2$ eigenspace with eigenvalue 4.0

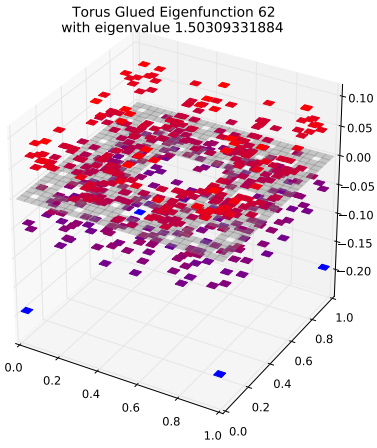


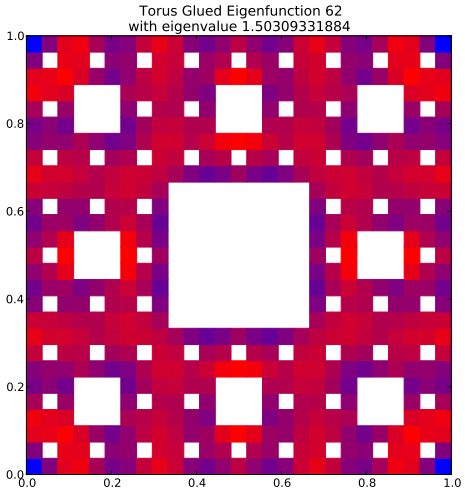


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.374597029888$
Dot Value: 0.0

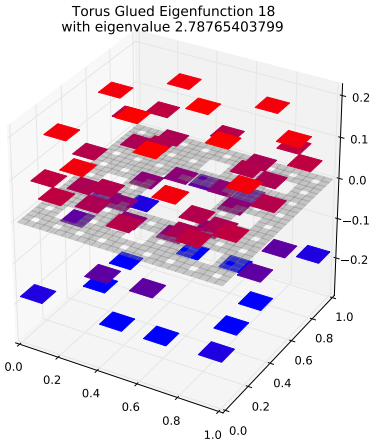
63 $M = 3$ Eigenfunction 62

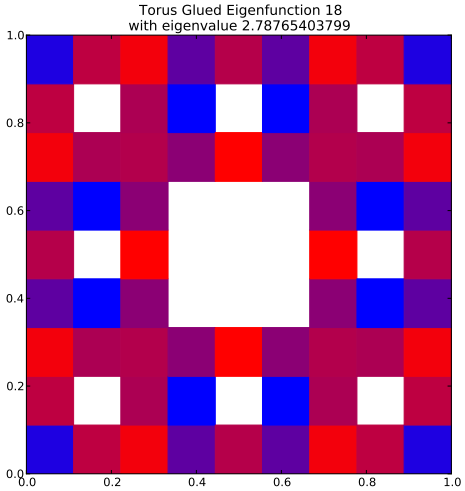
$M = 3$ Eigenfunction 62 has eigenvalue 1.50309331884





Compare to $m = 2$ eigenspace with eigenvalue 2.78765403799

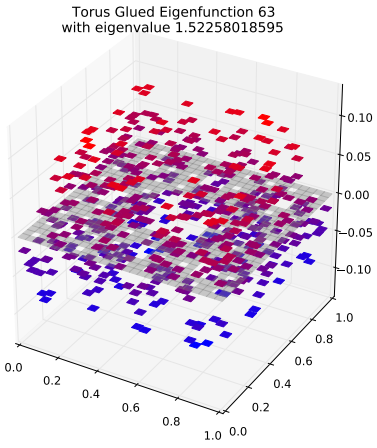


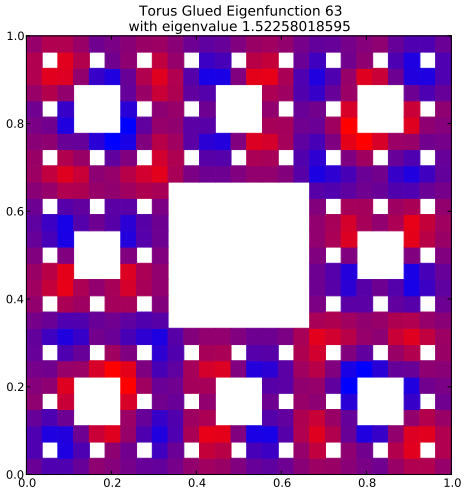


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.539196506581$
Dot Value: 0.4086668983241988

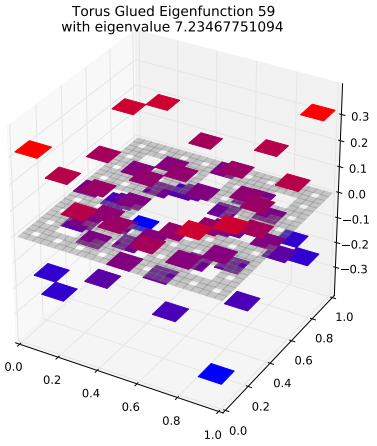
64 $M = 3$ Eigenfunction 63

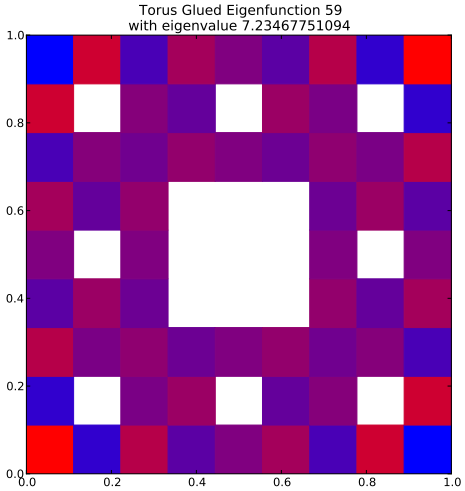
$M = 3$ Eigenfunction 63 has eigenvalue 1.52258018595





Compare to $m = 2$ eigenspace with eigenvalue 7.23467751094

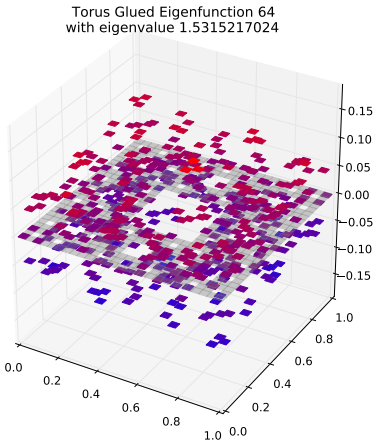


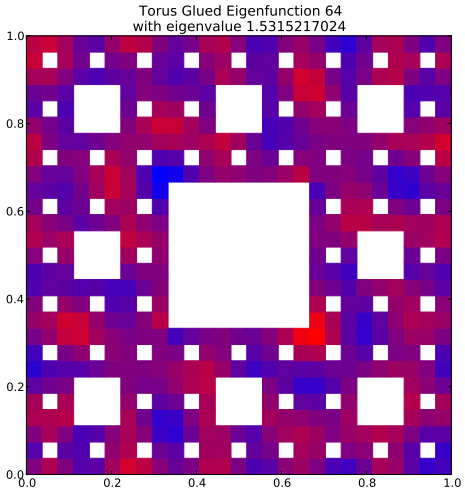


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.210455847361$
Dot Value: 0.18782194981002198

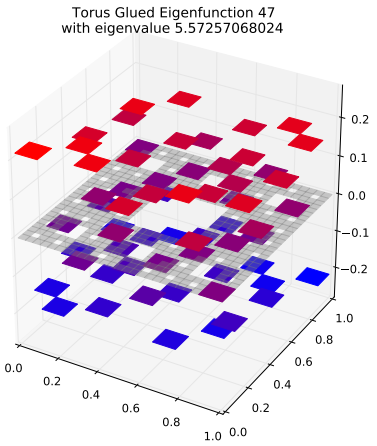
65 $M = 3$ Eigenfunction 64

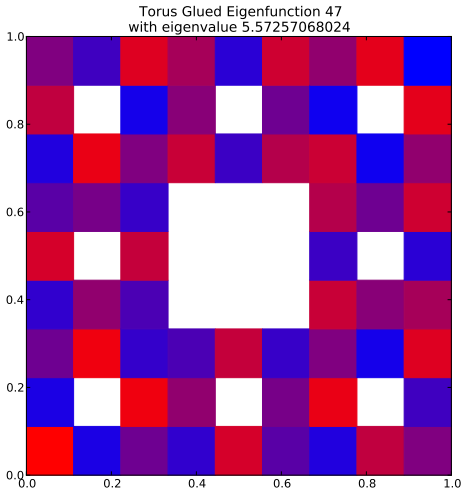
$M = 3$ Eigenfunction 64 has eigenvalue 1.5315217024





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

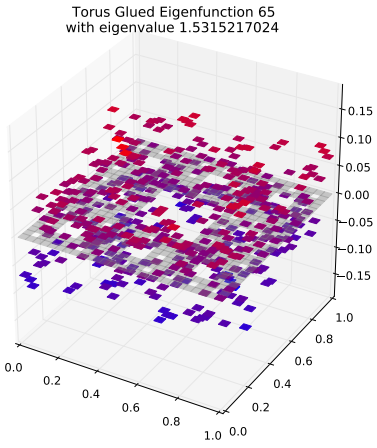


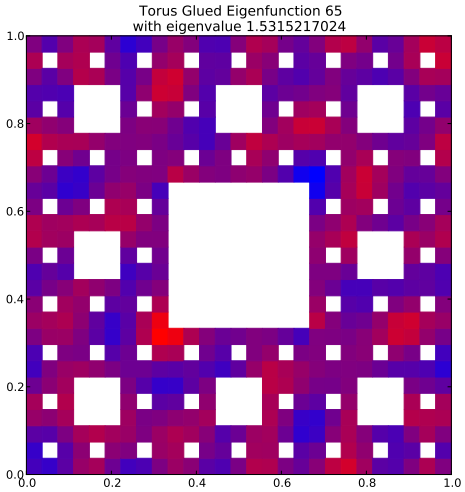


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.274832171771$
Dot Value: 0.15902086893926926

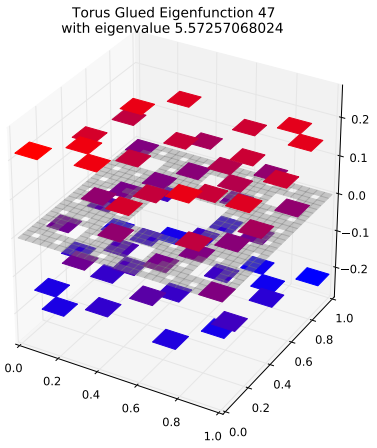
66 $M = 3$ Eigenfunction 65

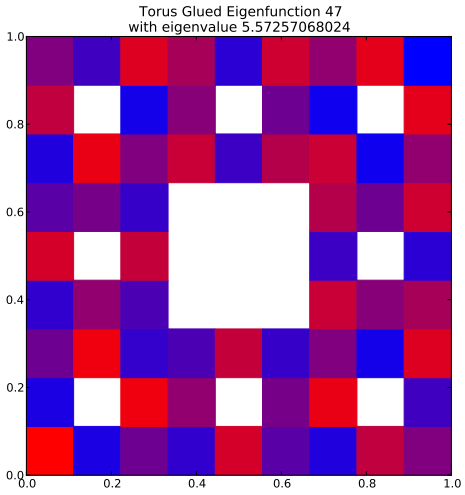
$M = 3$ Eigenfunction 65 has eigenvalue 1.5315217024





Compare to $m = 2$ eigenspace with eigenvalue 5.57257068024
(Note: Eigenspace Dimension > 1)

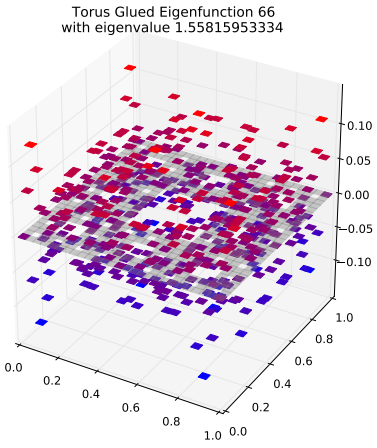


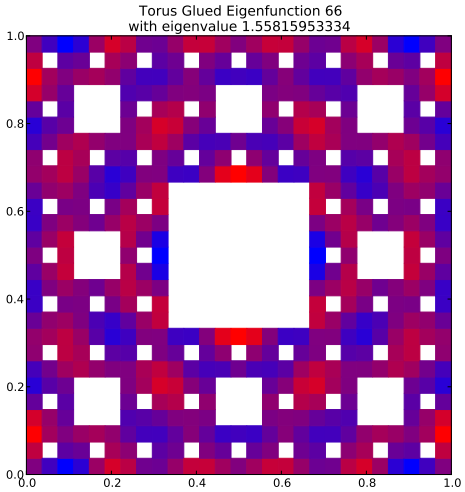


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.274832171771$
Dot Value: 0.15902086893927747

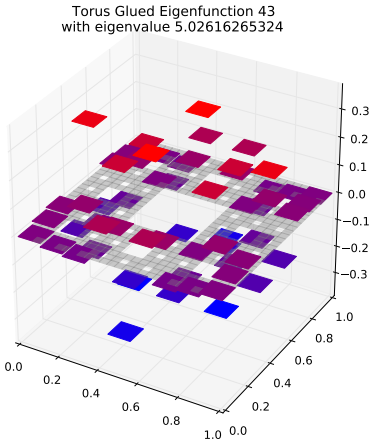
67 $M = 3$ Eigenfunction 66

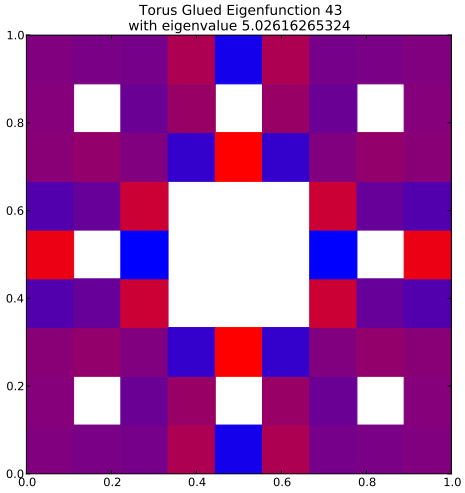
$M = 3$ Eigenfunction 66 has eigenvalue 1.55815953334





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

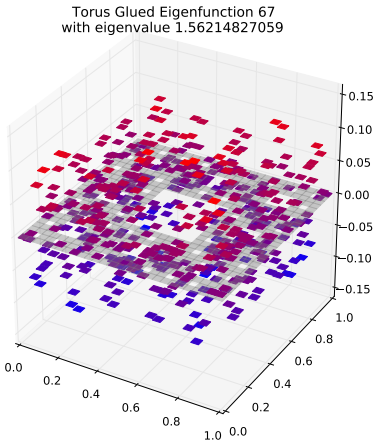


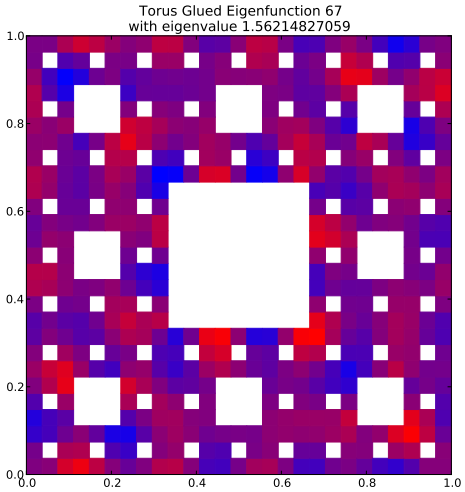


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.31000977104$
Dot Value: 0.1850096111451881

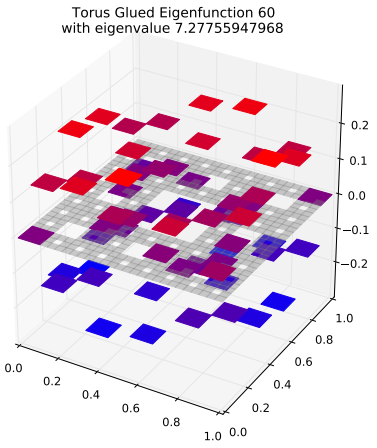
68 $M = 3$ Eigenfunction 67

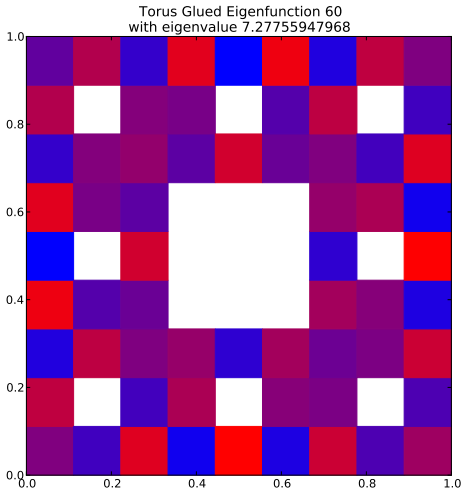
$M = 3$ Eigenfunction 67 has eigenvalue 1.56214827059





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

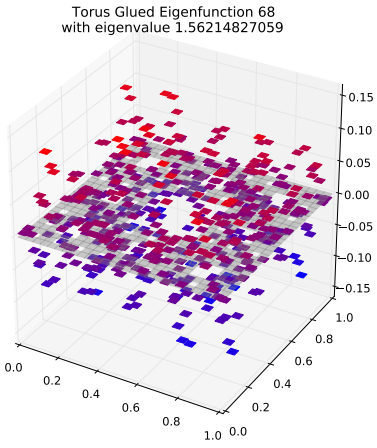


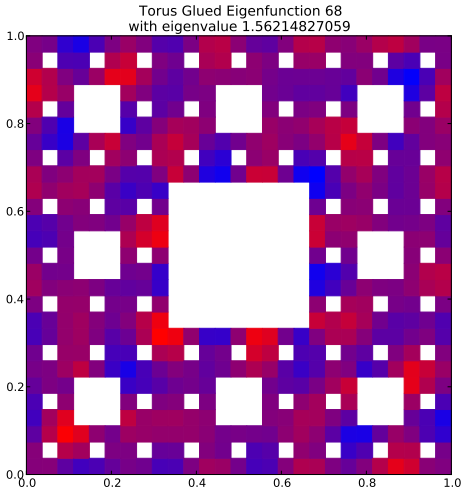


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2146527658$
Dot Value: 0.38451150978697757

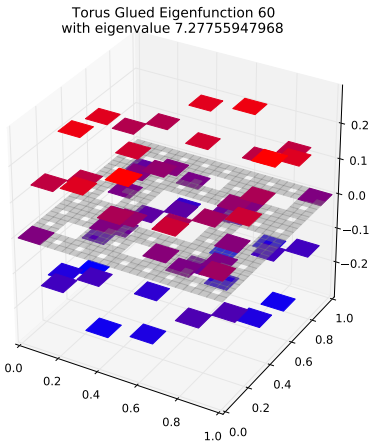
69 $M = 3$ Eigenfunction 68

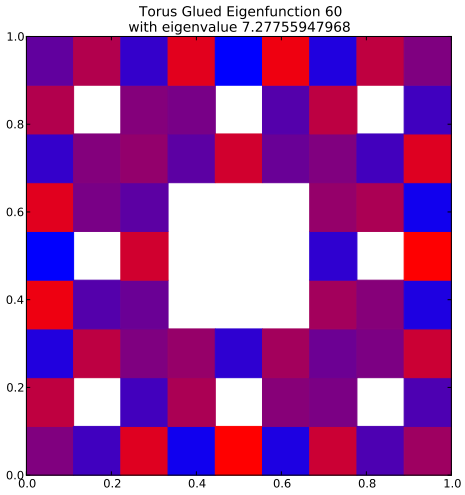
$M = 3$ Eigenfunction 68 has eigenvalue 1.56214827059





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

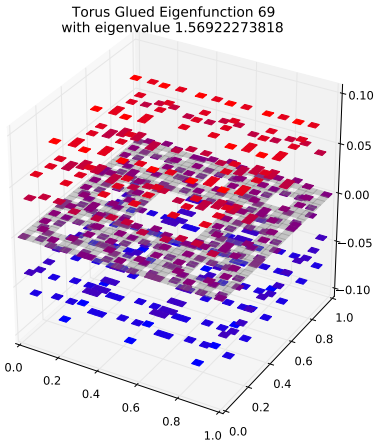


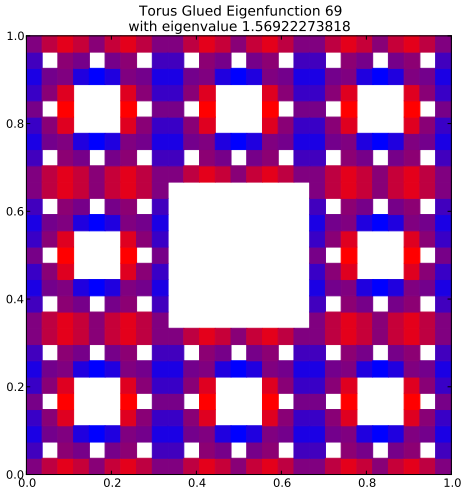


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2146527658$
Dot Value: 0.38451150978698234

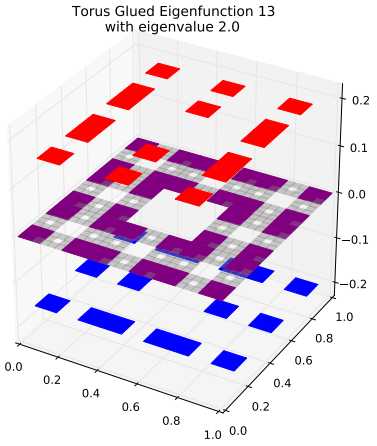
70 $M = 3$ Eigenfunction 69

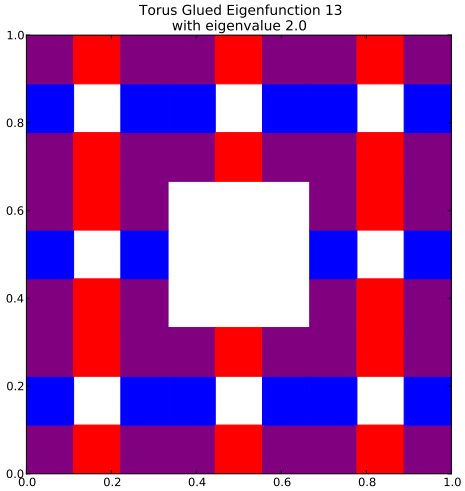
$M = 3$ Eigenfunction 69 has eigenvalue 1.56922273818





Compare to $m = 2$ eigenspace with eigenvalue 2.0

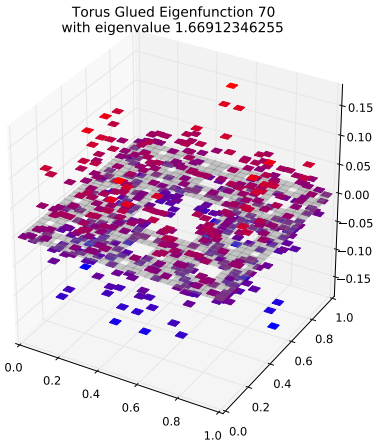


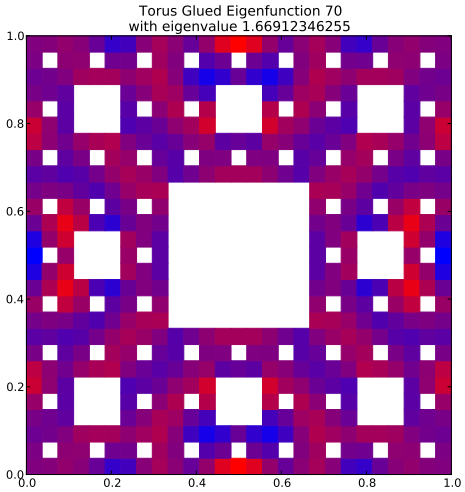


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.78461136909$
Dot Value: 1.1102230246251565e-16

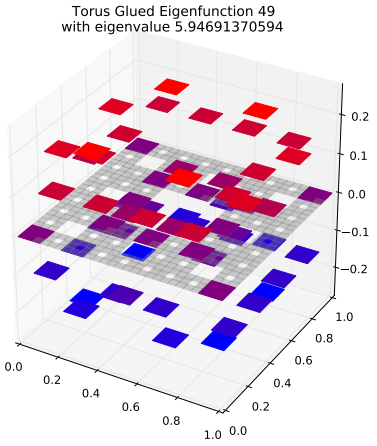
71 $M = 3$ Eigenfunction 70

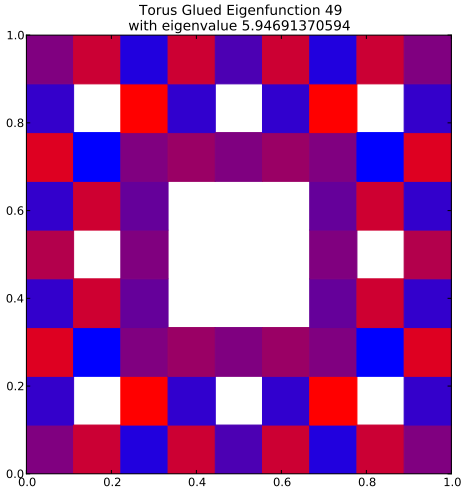
$M = 3$ Eigenfunction 70 has eigenvalue 1.66912346255





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

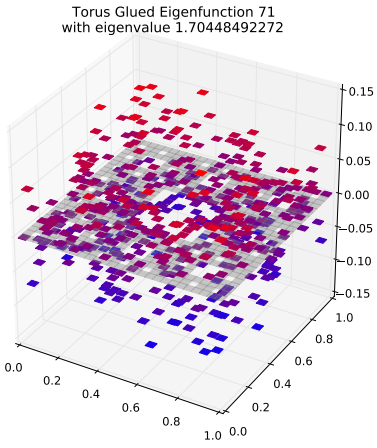


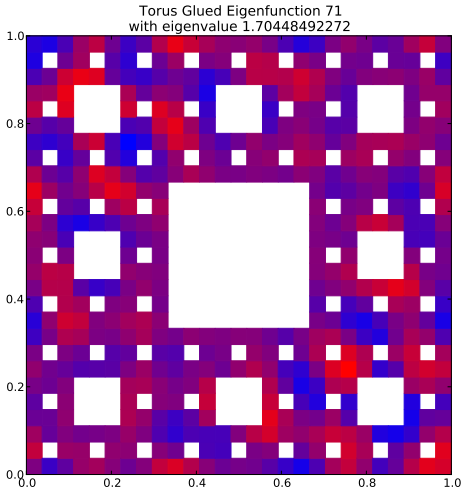


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.280670536867$
Dot Value: 0.18042018558937634

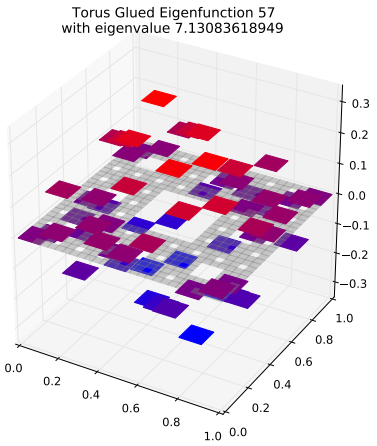
72 $M = 3$ Eigenfunction 71

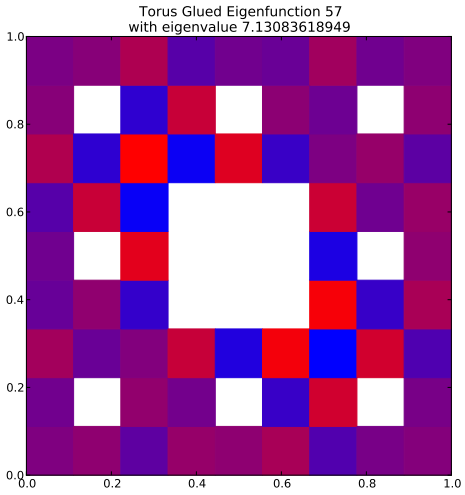
$M = 3$ Eigenfunction 71 has eigenvalue 1.70448492272





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

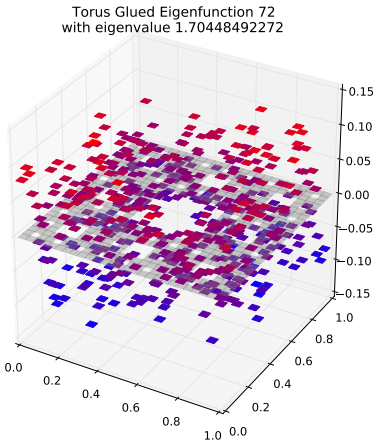


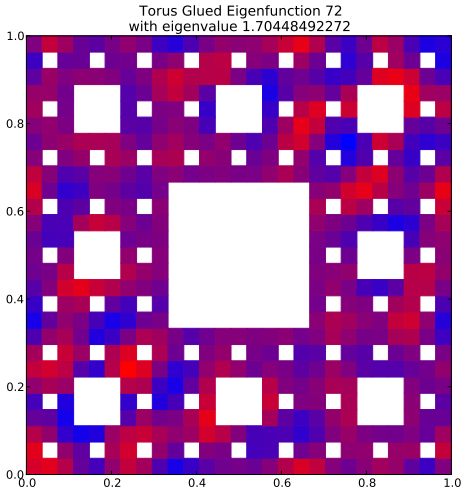


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.239030161039$
Dot Value: 0.36383795123211193

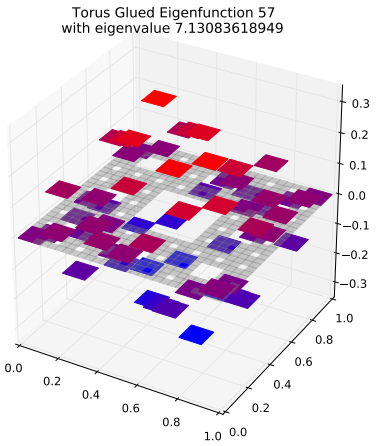
73 $M = 3$ Eigenfunction 72

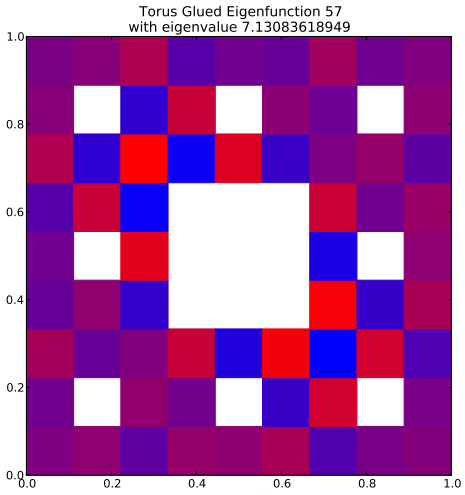
$M = 3$ Eigenfunction 72 has eigenvalue 1.70448492272





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

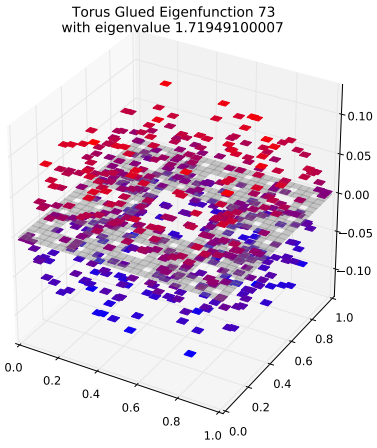


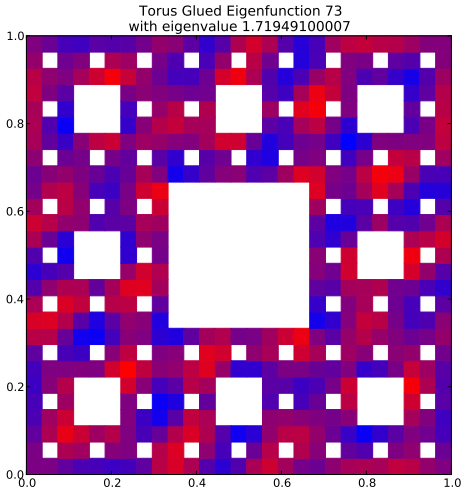


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.239030161039$
Dot Value: 0.3638379512321075

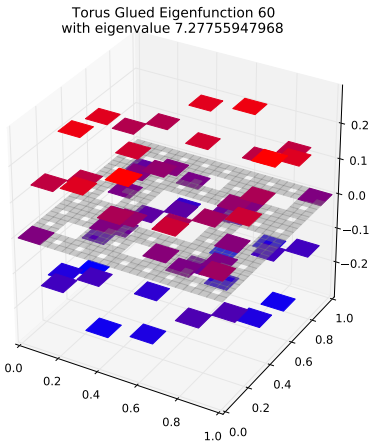
74 $M = 3$ Eigenfunction 73

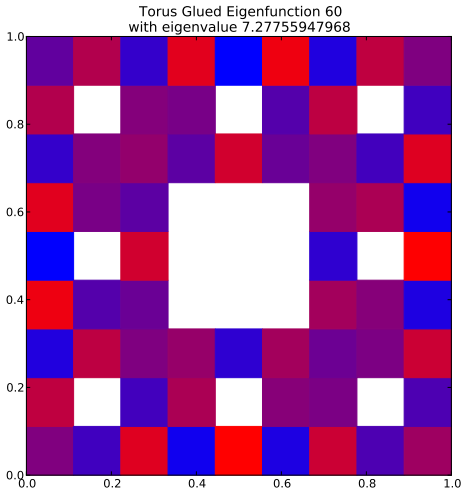
$M = 3$ Eigenfunction 73 has eigenvalue 1.71949100007





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

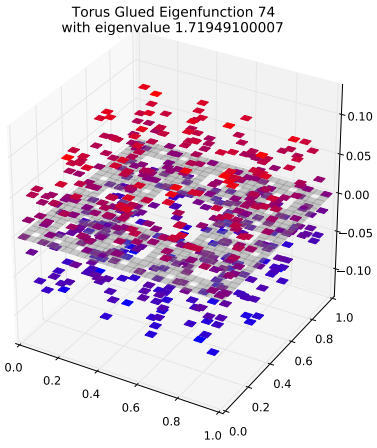


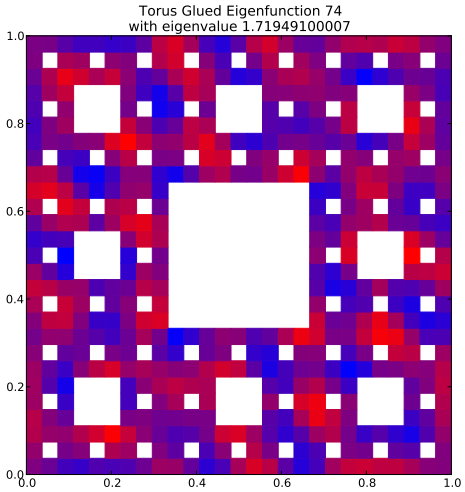


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.236273025988$
Dot Value: 0.443201902362423 85

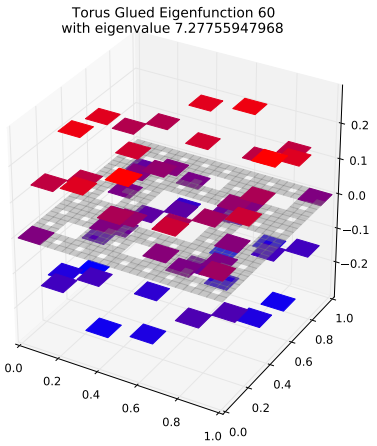
75 $M = 3$ Eigenfunction 74

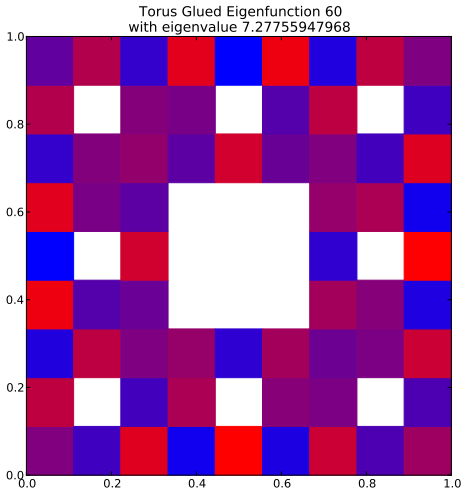
$M = 3$ Eigenfunction 74 has eigenvalue 1.71949100007





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

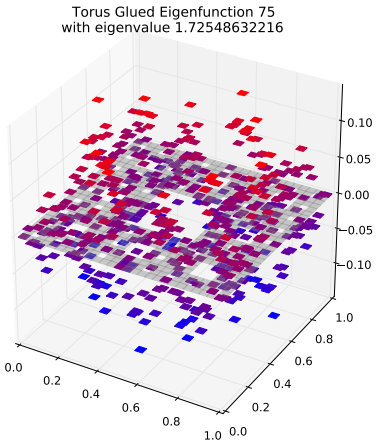


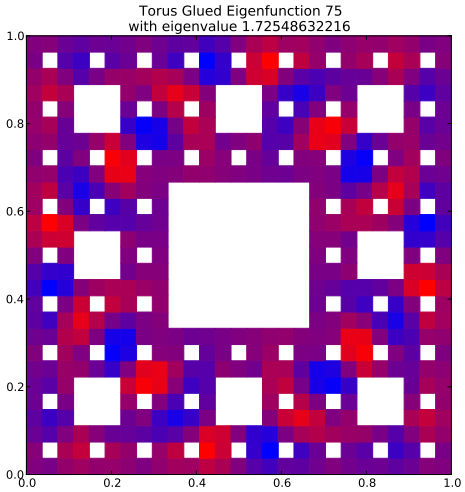


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.236273025988$
Dot Value: 0.443201902362420 85

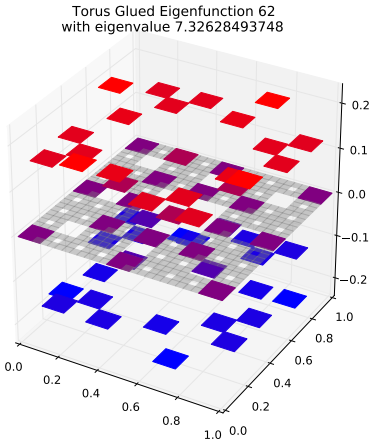
76 $M = 3$ Eigenfunction 75

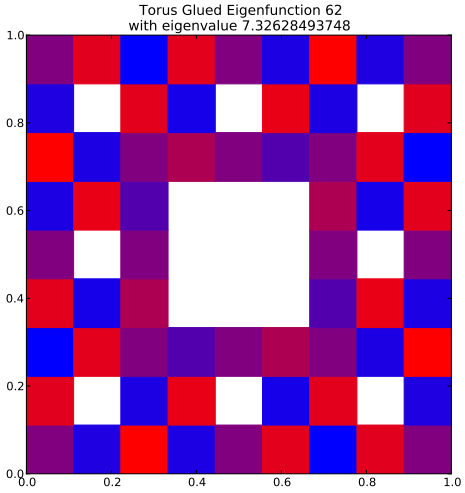
$M = 3$ Eigenfunction 75 has eigenvalue 1.72548632216





Compare to $m = 2$ eigenspace with eigenvalue 7.32628493748

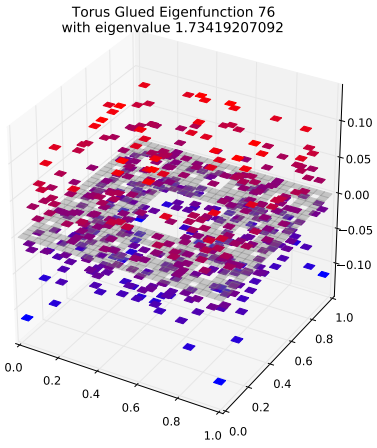


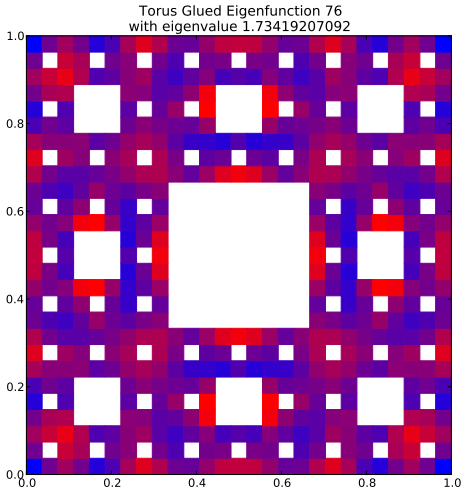


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.235519958189$
Dot Value: 0.20618040631850454

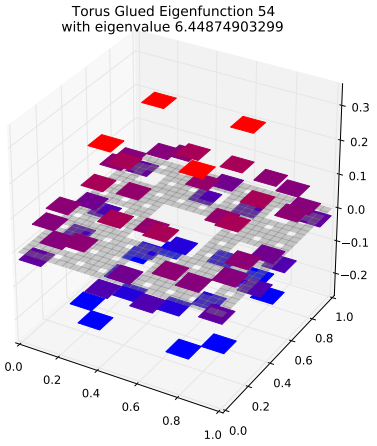
77 $M = 3$ Eigenfunction 76

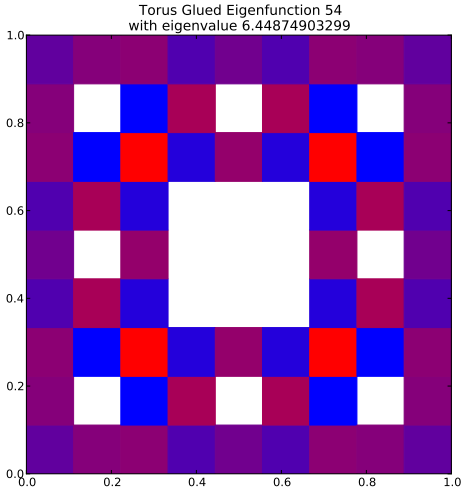
$M = 3$ Eigenfunction 76 has eigenvalue 1.73419207092





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

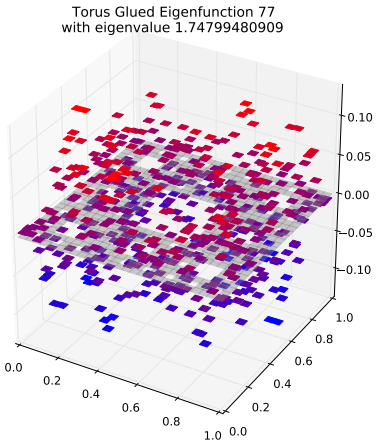


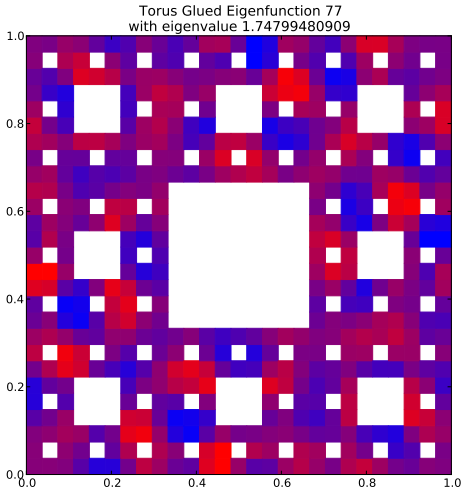


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.26891914417$
Dot Value: 0.28806237030453297

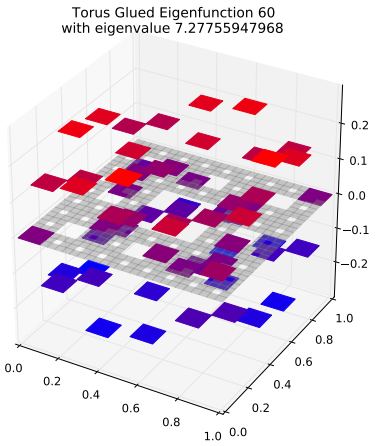
78 $M = 3$ Eigenfunction 77

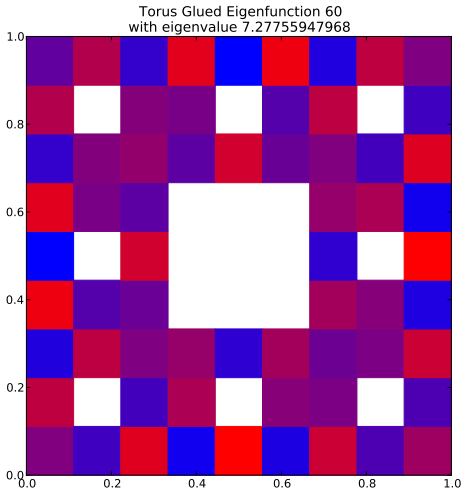
$M = 3$ Eigenfunction 77 has eigenvalue 1.74799480909





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

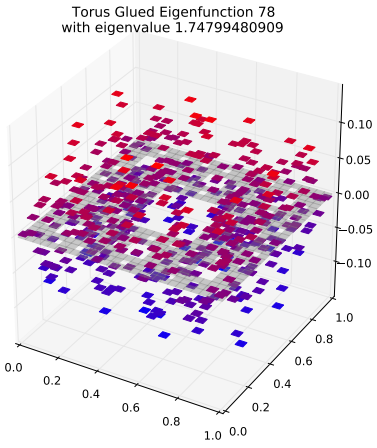


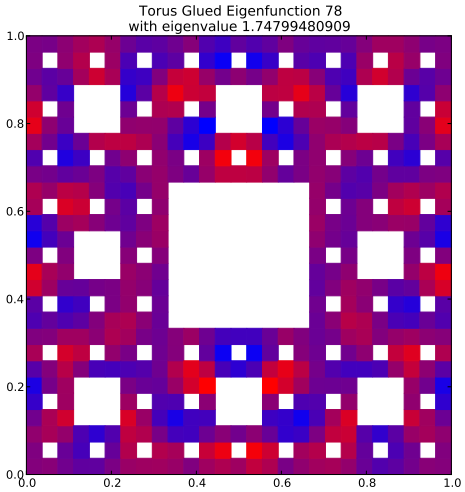


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.240189697381$
Dot Value: 0.33160284705466614

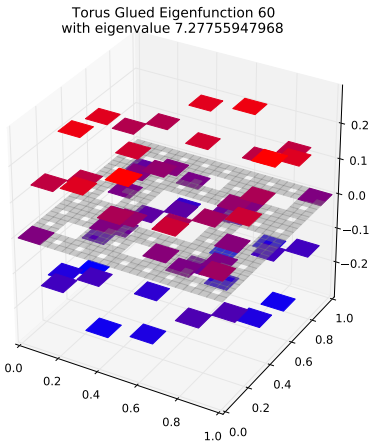
79 $M = 3$ Eigenfunction 78

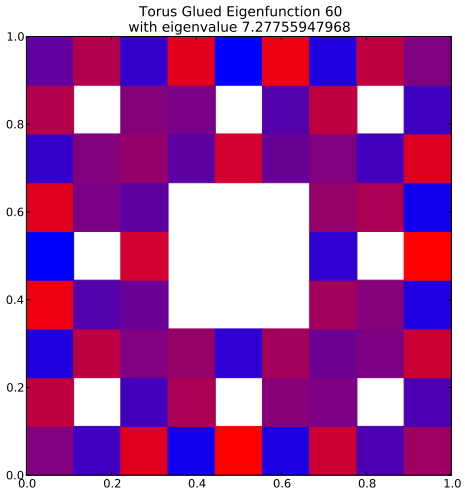
$M = 3$ Eigenfunction 78 has eigenvalue 1.74799480909





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

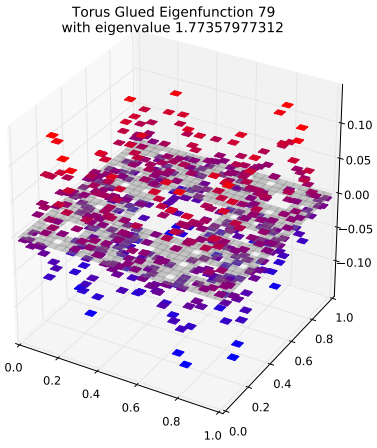


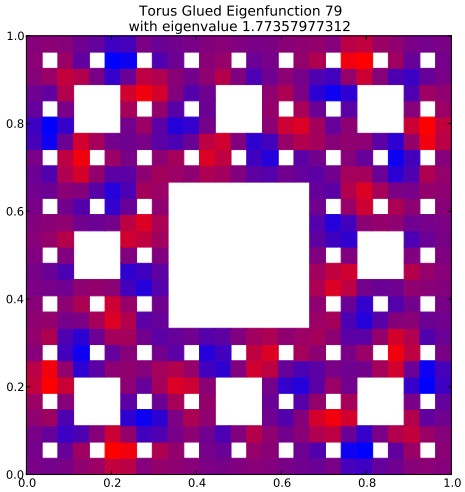


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.240189697381$
Dot Value: 0.3316028470547069

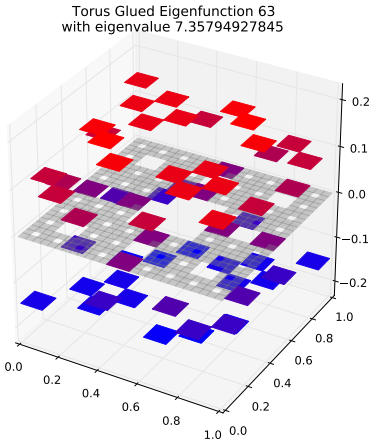
80 $M = 3$ Eigenfunction 79

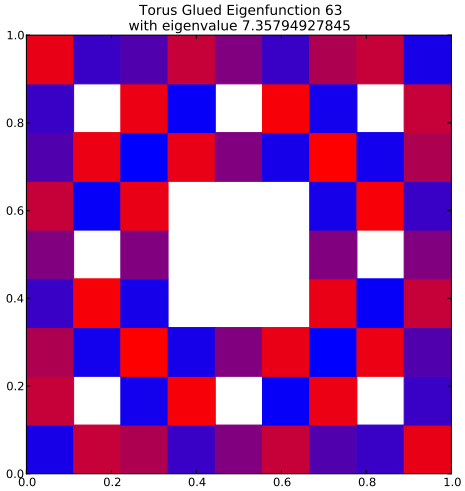
$M = 3$ Eigenfunction 79 has eigenvalue 1.77357977312





Compare to $m = 2$ eigenspace with eigenvalue 7.35794927845

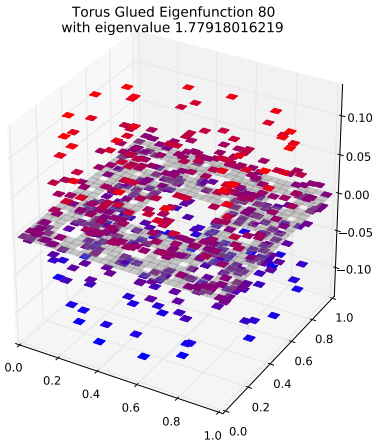


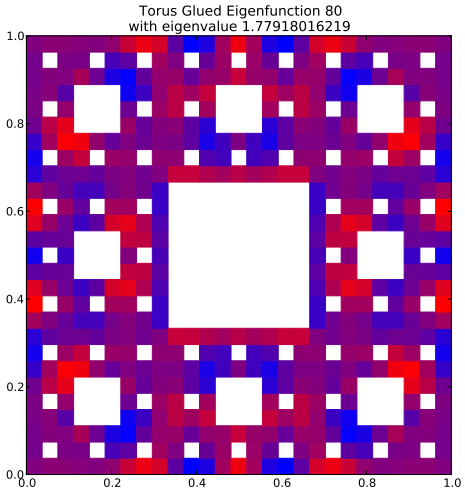


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.241042674528$
Dot Value: 0.13671647268235076

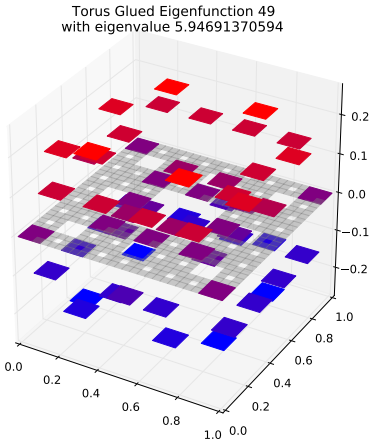
81 $M = 3$ Eigenfunction 80

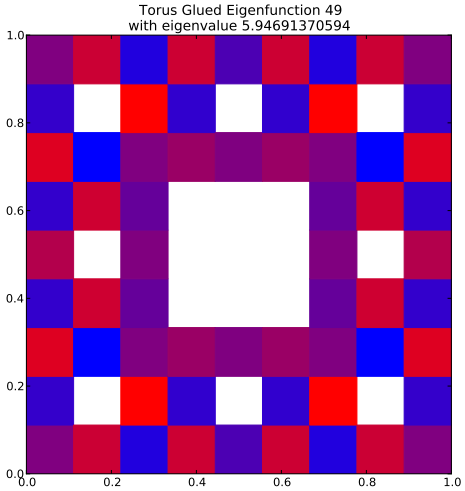
$M = 3$ Eigenfunction 80 has eigenvalue 1.77918016219





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

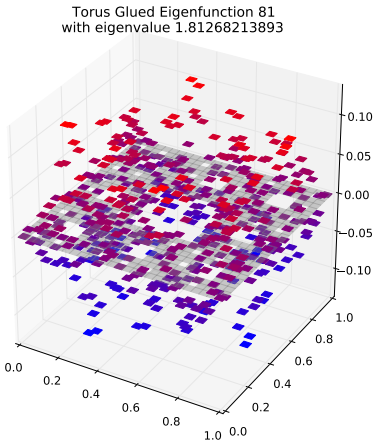


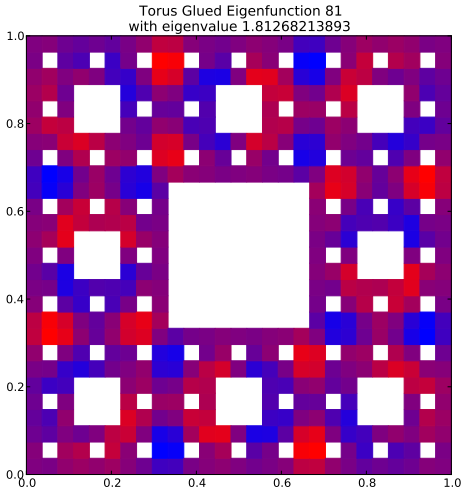


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.299177060602$
Dot Value: 0.17634222450748693

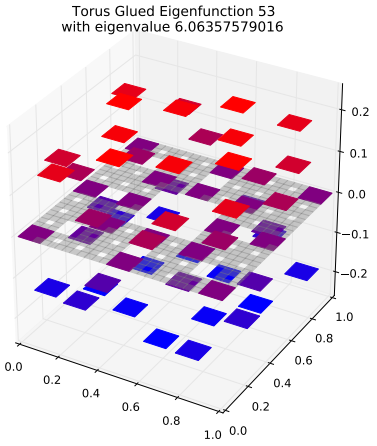
82 $M = 3$ Eigenfunction 81

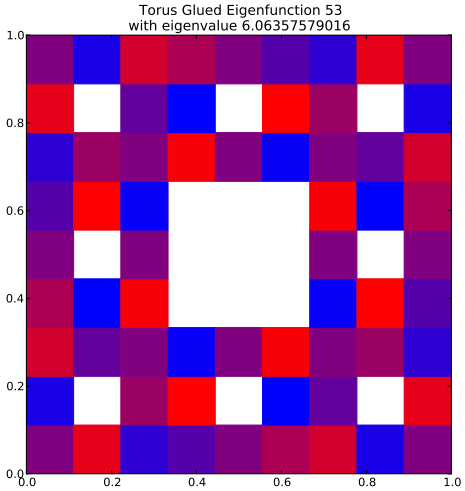
$M = 3$ Eigenfunction 81 has eigenvalue 1.81268213893





Compare to $m = 2$ eigenspace with eigenvalue 6.06357579016

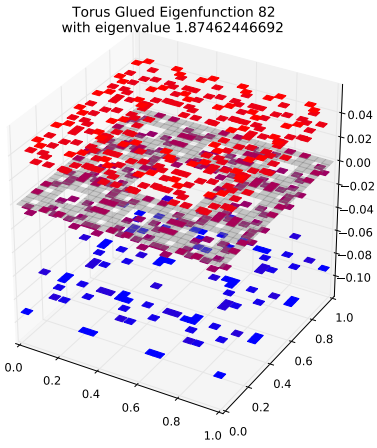


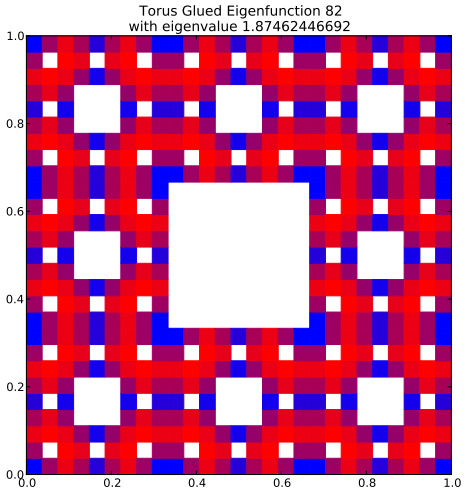


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.298946067743$
Dot Value: 0.06446832319032991

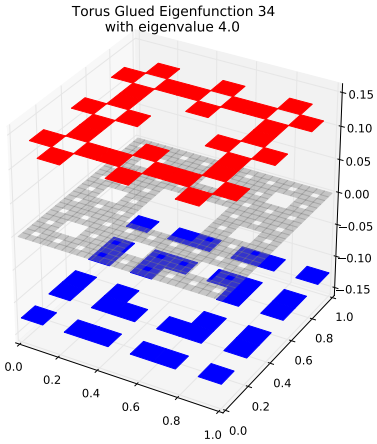
83 $M = 3$ Eigenfunction 82

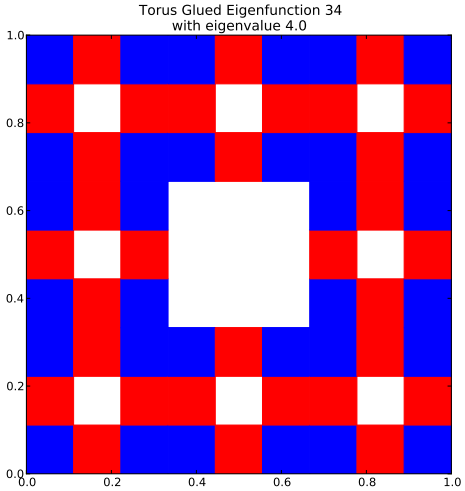
$M = 3$ Eigenfunction 82 has eigenvalue 1.87462446692





Compare to $m = 2$ eigenspace with eigenvalue 4.0

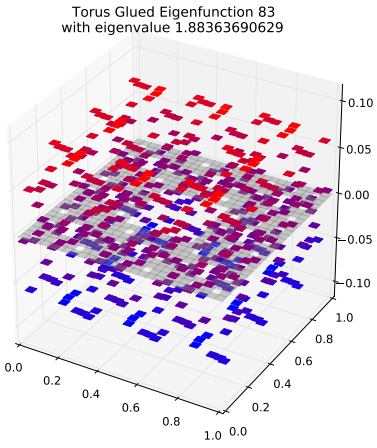


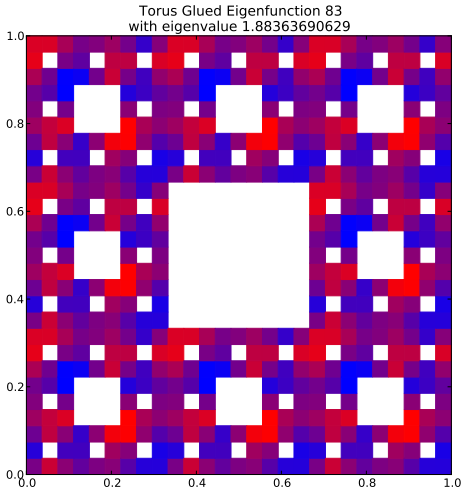


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.468656116731$
Dot Value: 0.0

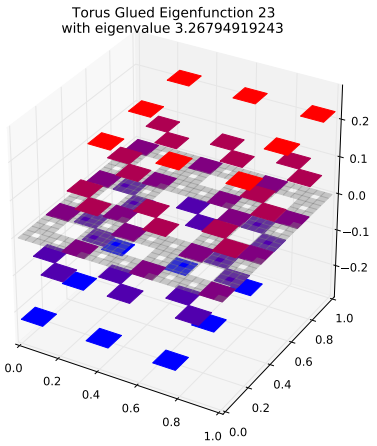
84 $M = 3$ Eigenfunction 83

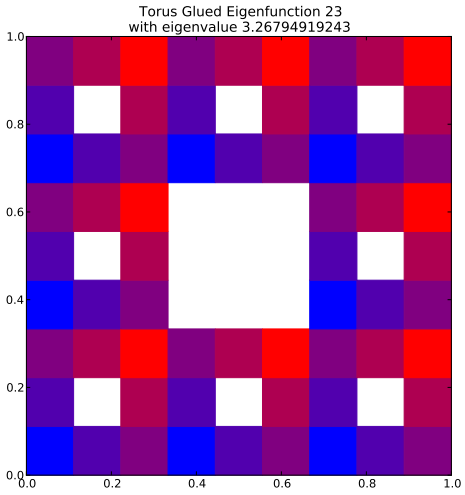
$M = 3$ Eigenfunction 83 has eigenvalue 1.88363690629





Compare to $m = 2$ eigenspace with eigenvalue 3.26794919243
(Note: Eigenspace Dimension > 1)

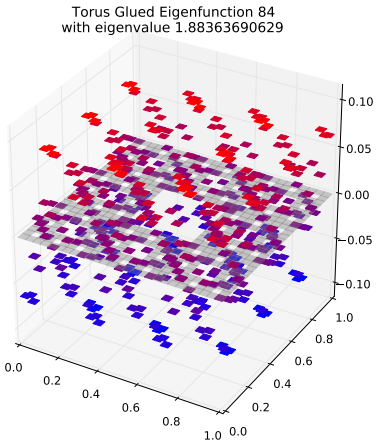


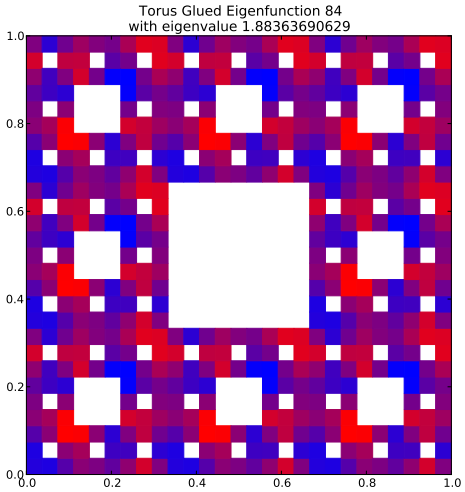


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.576397243462$
Dot Value: 0.11312368070719858

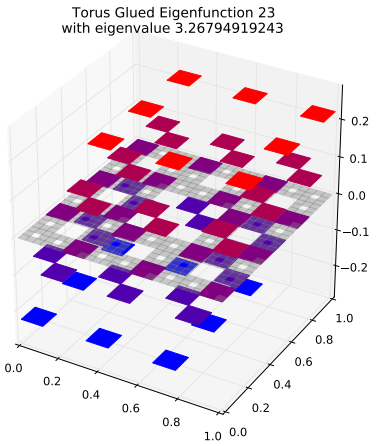
85 $M = 3$ Eigenfunction 84

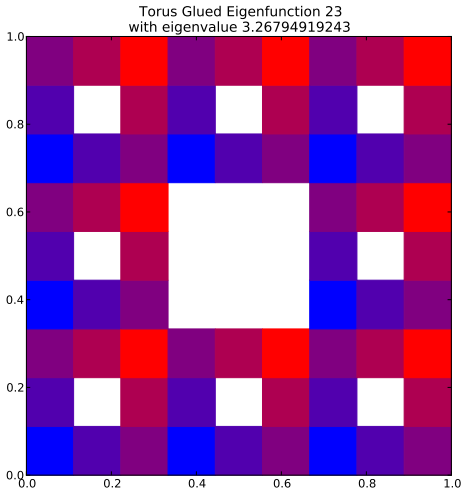
$M = 3$ Eigenfunction 84 has eigenvalue 1.88363690629





Compare to $m = 2$ eigenspace with eigenvalue 3.26794919243
(Note: Eigenspace Dimension > 1)

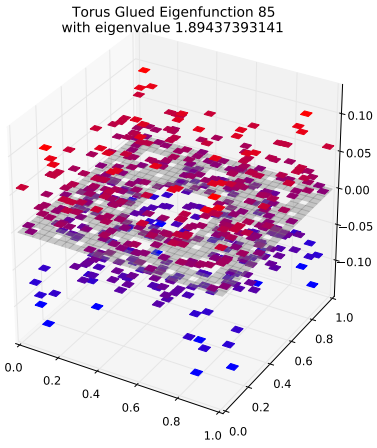


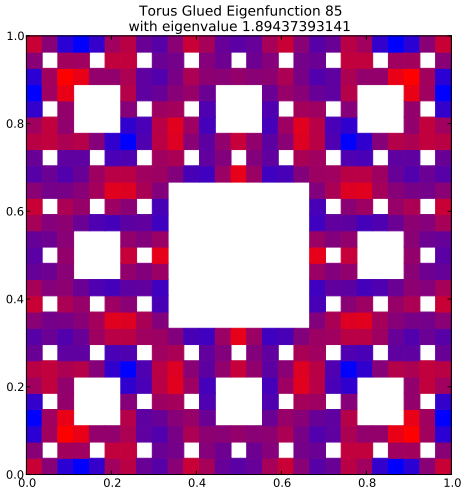


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.576397243462$
Dot Value: 0.11312368070719592

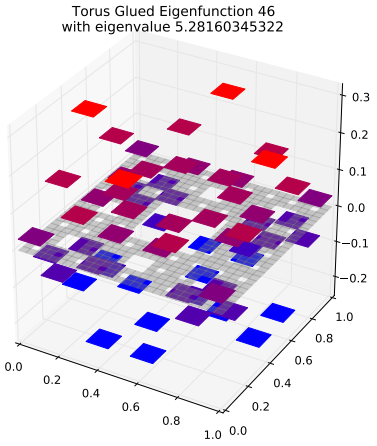
86 $M = 3$ Eigenfunction 85

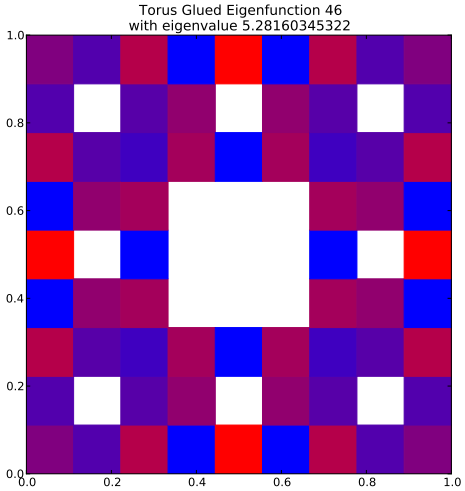
$M = 3$ Eigenfunction 85 has eigenvalue 1.89437393141





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

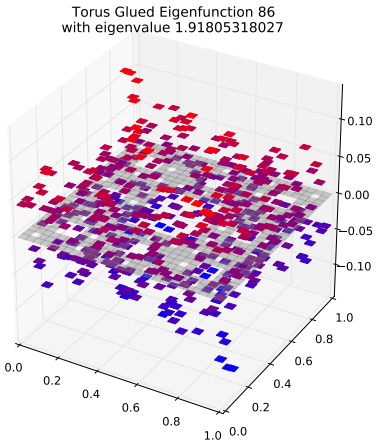


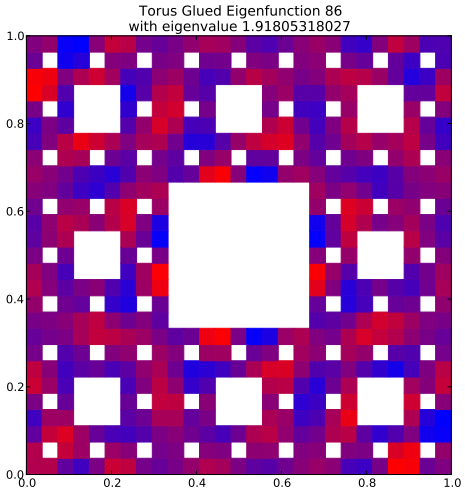


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.358674017879$
Dot Value: 0.28385441281445767

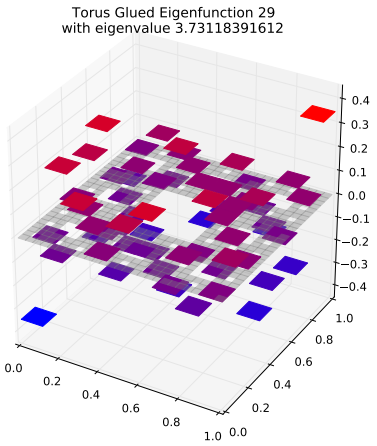
87 $M = 3$ Eigenfunction 86

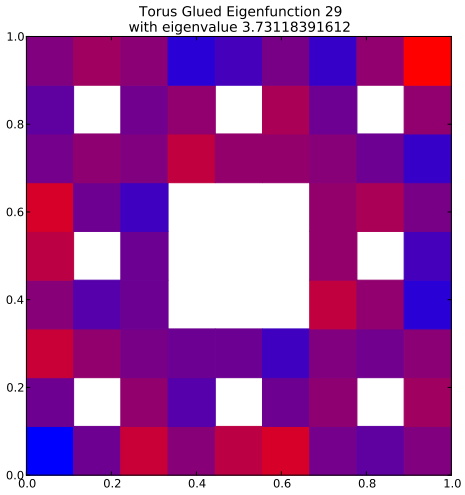
$M = 3$ Eigenfunction 86 has eigenvalue 1.91805318027





Compare to $m = 2$ eigenspace with eigenvalue 3.73118391612
(Note: Eigenspace Dimension > 1)

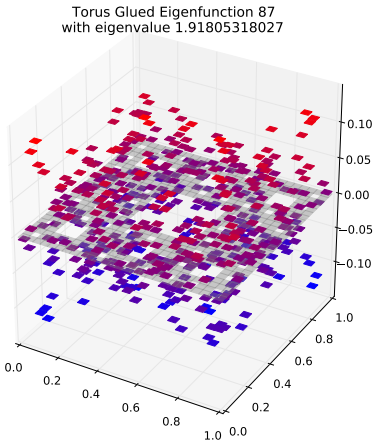


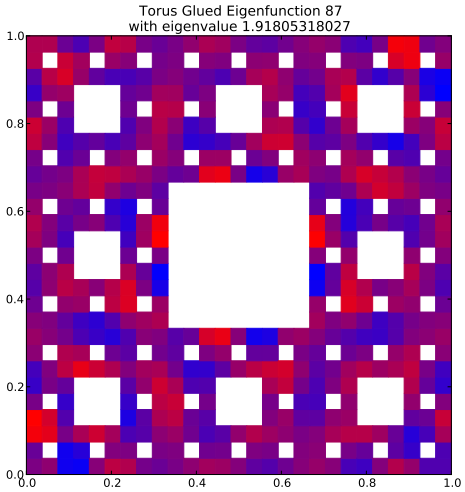


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.51406020807$
Dot Value: 0.48449267518850947

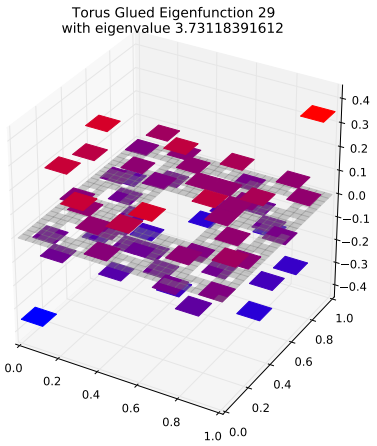
88 $M = 3$ Eigenfunction 87

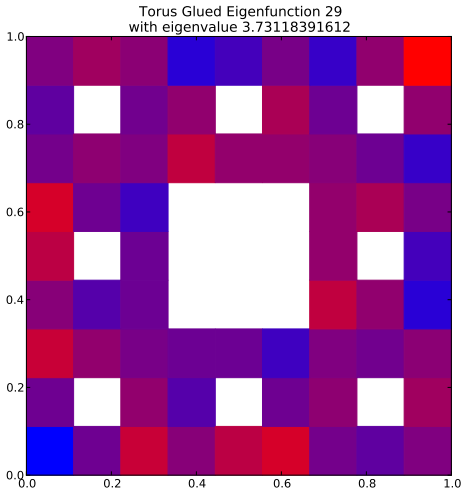
$M = 3$ Eigenfunction 87 has eigenvalue 1.91805318027





Compare to $m = 2$ eigenspace with eigenvalue 3.73118391612
(Note: Eigenspace Dimension > 1)

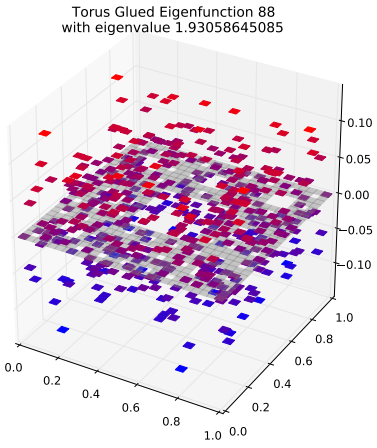


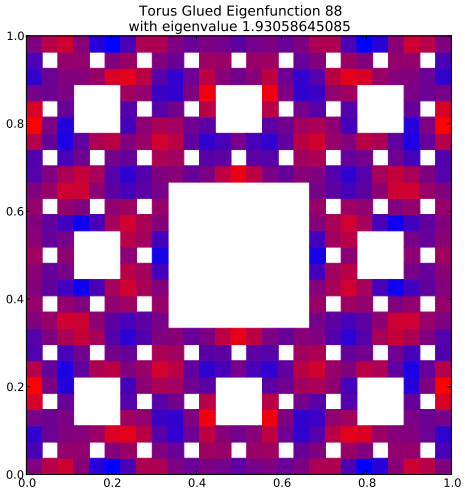


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.51406020807$
Dot Value: 0.4844926751885118

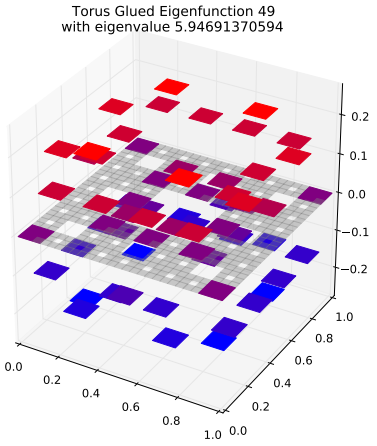
89 $M = 3$ Eigenfunction 88

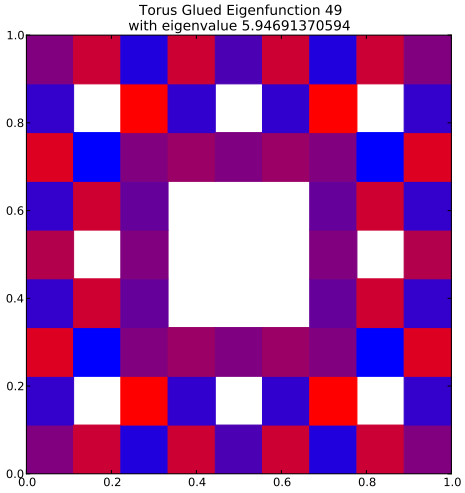
$M = 3$ Eigenfunction 88 has eigenvalue 1.93058645085





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

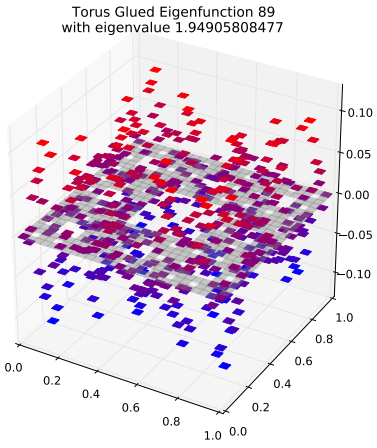


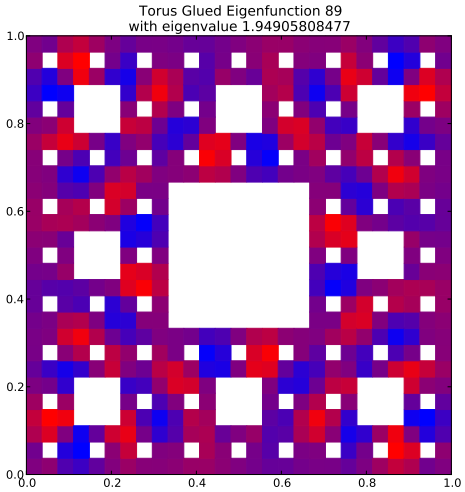


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.32463670171$
Dot Value: 0.12081639629330843

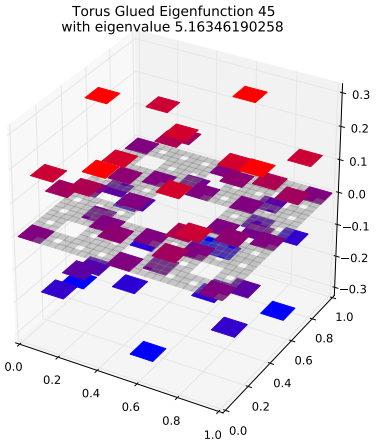
90 $M = 3$ Eigenfunction 89

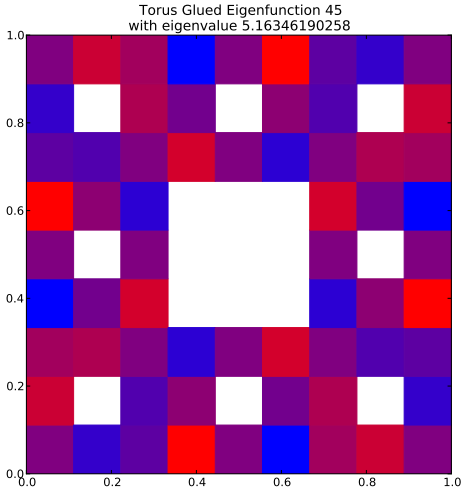
$M = 3$ Eigenfunction 89 has eigenvalue 1.94905808477





Compare to $m = 2$ eigenspace with eigenvalue 5.16346190258

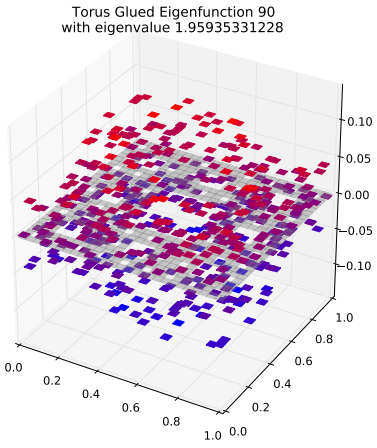


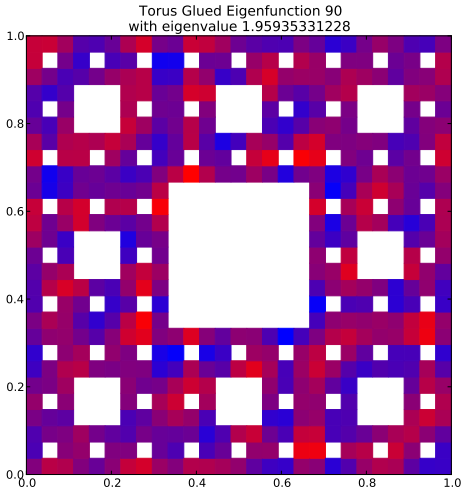


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.37747118533$
Dot Value: 0.28946164039226274

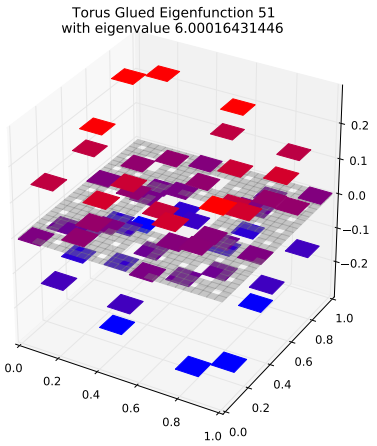
91 $M = 3$ Eigenfunction 90

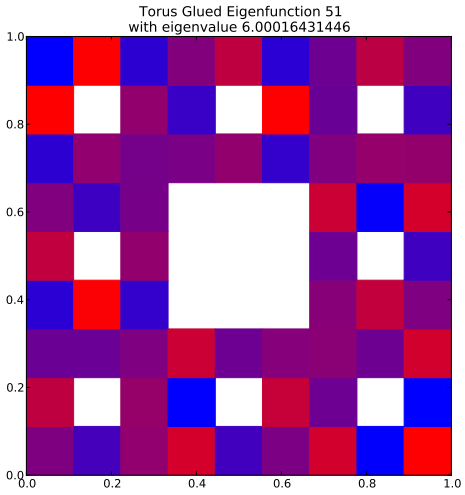
$M = 3$ Eigenfunction 90 has eigenvalue 1.95935331228





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

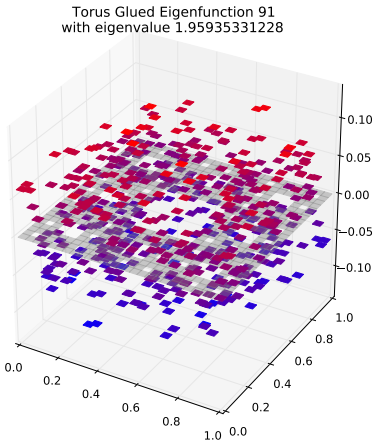


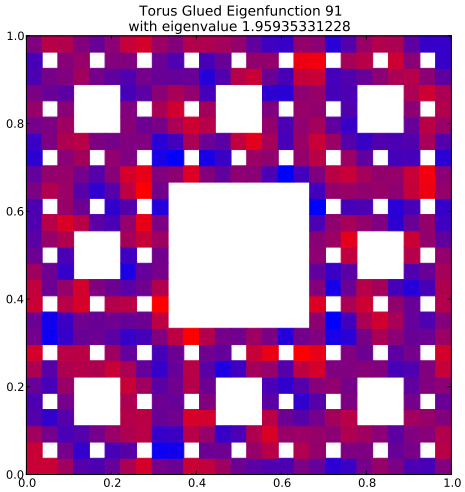


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.326549942568$
Dot Value: 0.2646600692833917

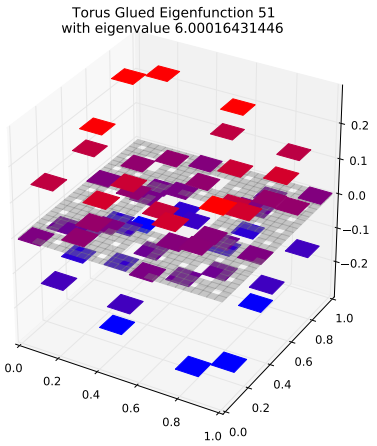
92 $M = 3$ Eigenfunction 91

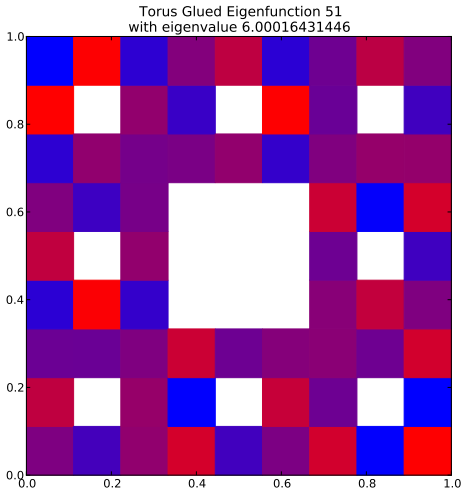
$M = 3$ Eigenfunction 91 has eigenvalue 1.95935331228





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

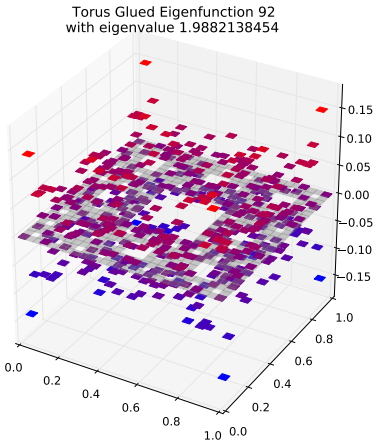


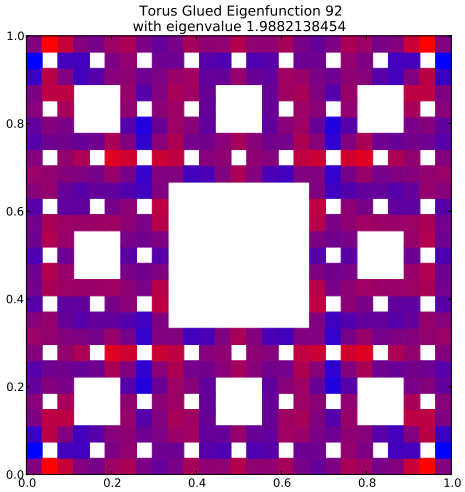


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.326549942568$
Dot Value: 0.26466006928339747

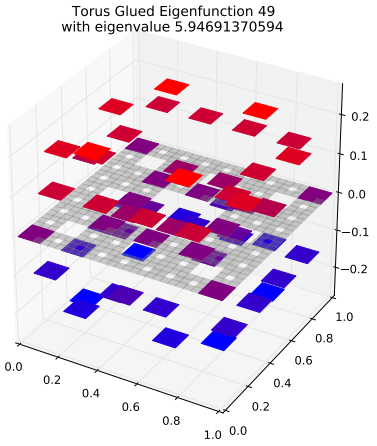
93 $M = 3$ Eigenfunction 92

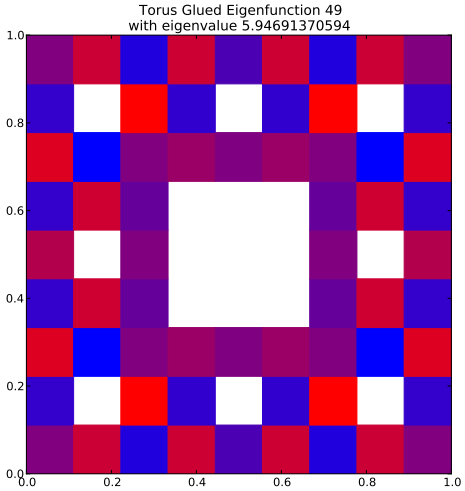
$M = 3$ Eigenfunction 92 has eigenvalue 1.9882138454





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

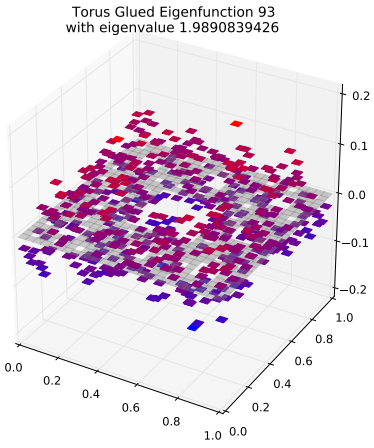


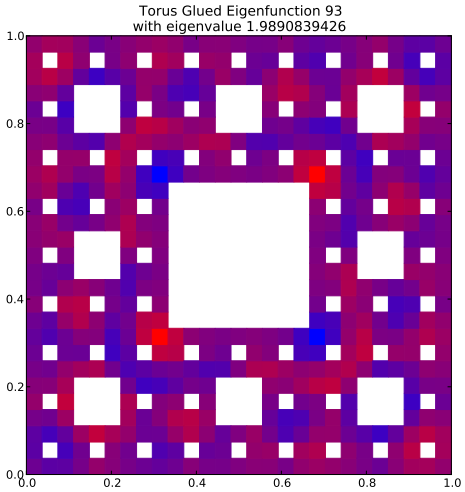


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.334327004512$
Dot Value: 0.3381443581011352

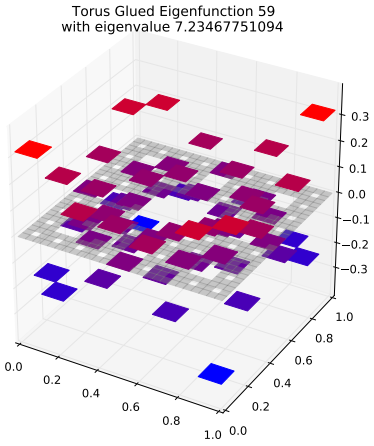
94 $M = 3$ Eigenfunction 93

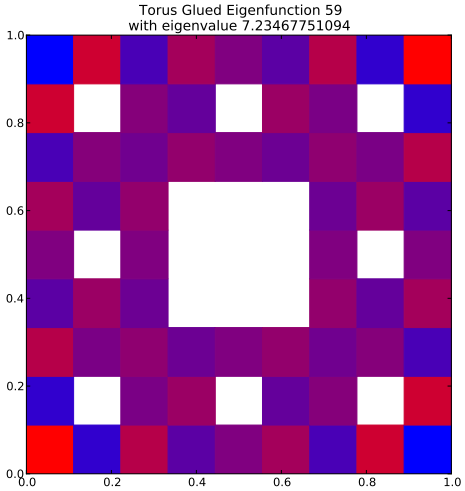
$M = 3$ Eigenfunction 93 has eigenvalue 1.9890839426





Compare to $m = 2$ eigenspace with eigenvalue 7.23467751094

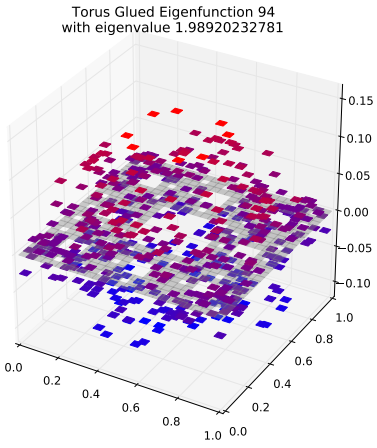


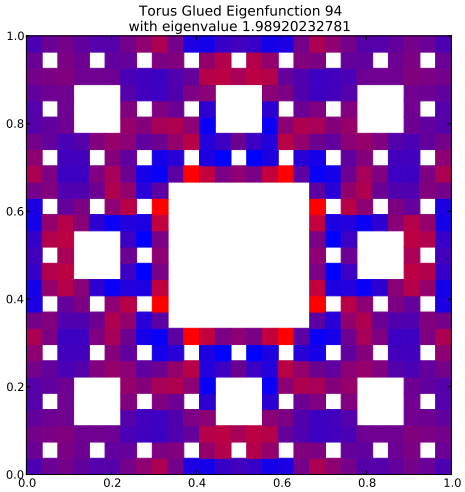


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.274937471587$
Dot Value: 0.22413464832315655

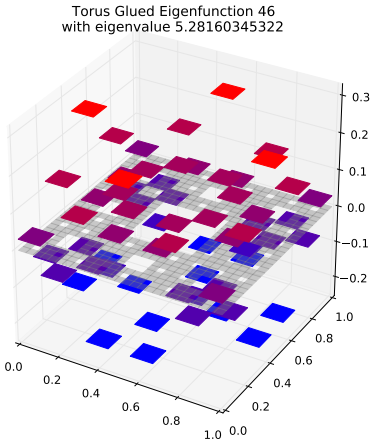
95 $M = 3$ Eigenfunction 94

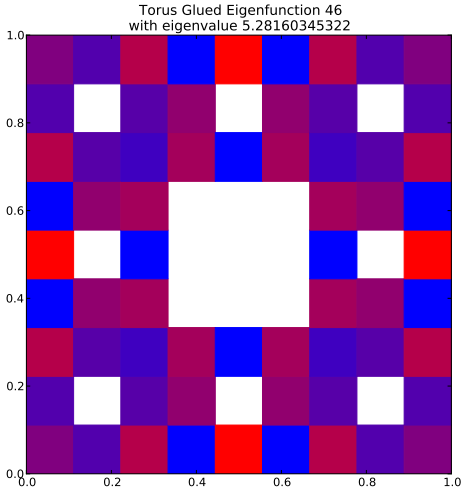
$M = 3$ Eigenfunction 94 has eigenvalue 1.98920232781





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

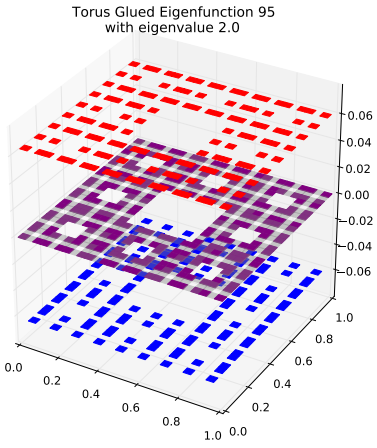


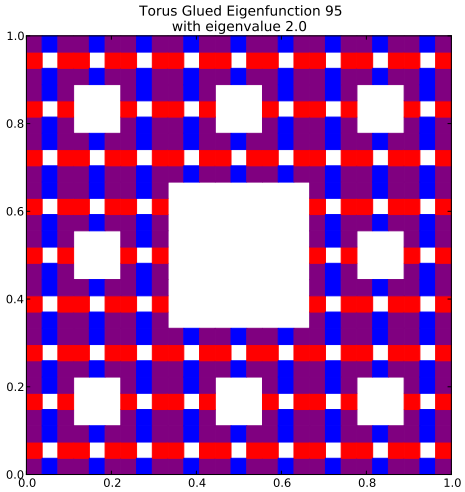


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.376628488949$
Dot Value: 0.3032358382404954

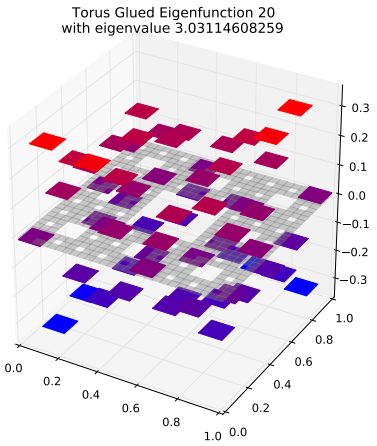
96 $M = 3$ Eigenfunction 95

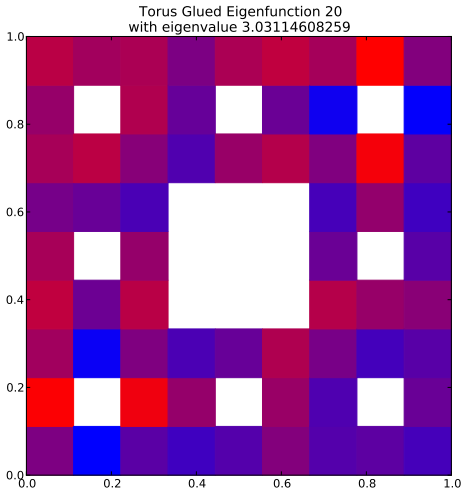
$M = 3$ Eigenfunction 95 has eigenvalue 2.0





Compare to $m = 2$ eigenspace with eigenvalue 3.03114608259
(Note: Eigenspace Dimension > 1)

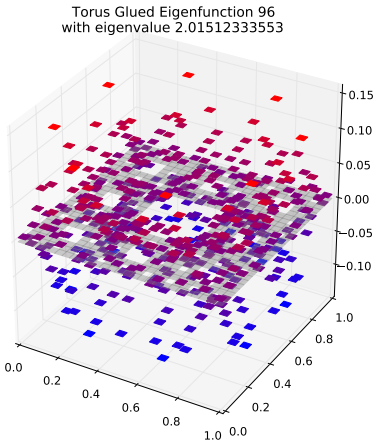


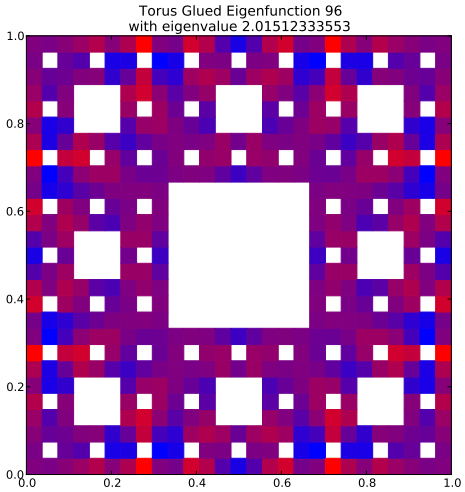


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.659816434281$
Dot Value: 2

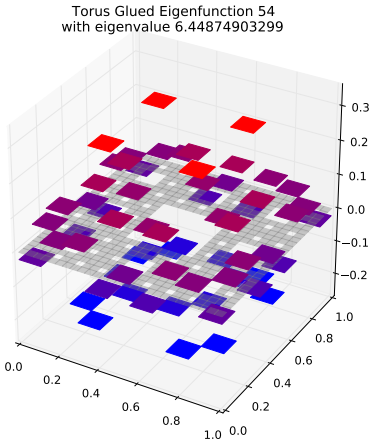
97 $M = 3$ Eigenfunction 96

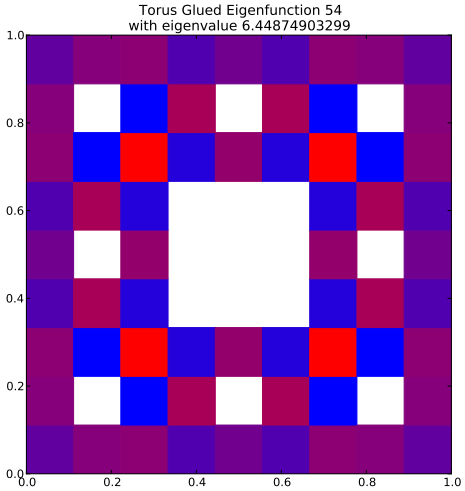
$M = 3$ Eigenfunction 96 has eigenvalue 2.01512333553





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

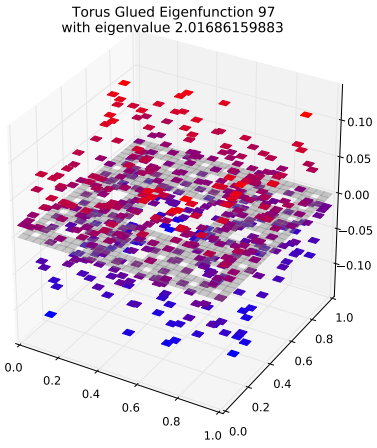


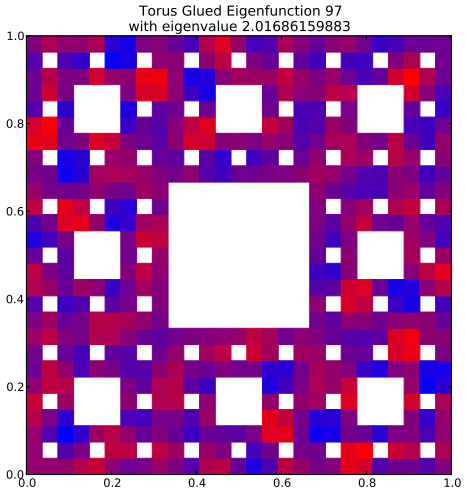


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.312482828098$
Dot Value: 0.11735730928401822

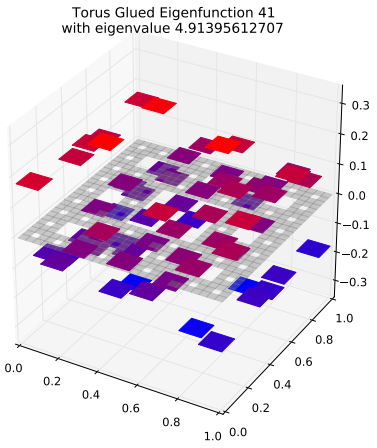
98 $M = 3$ Eigenfunction 97

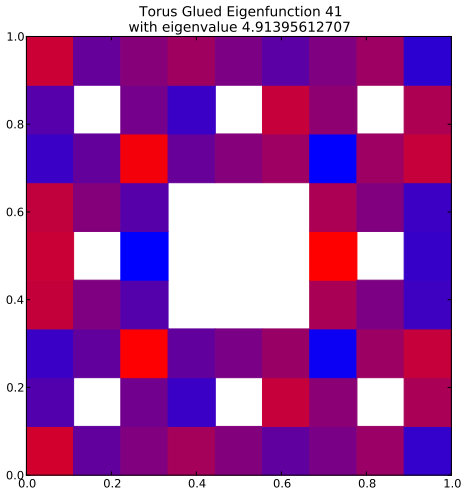
$M = 3$ Eigenfunction 97 has eigenvalue 2.01686159883





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

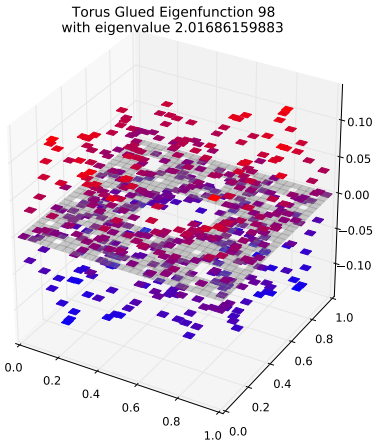


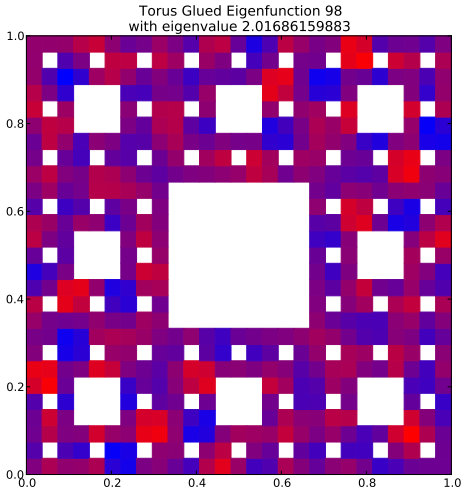


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.410435410222$
Dot Value: 0.4116516475148321

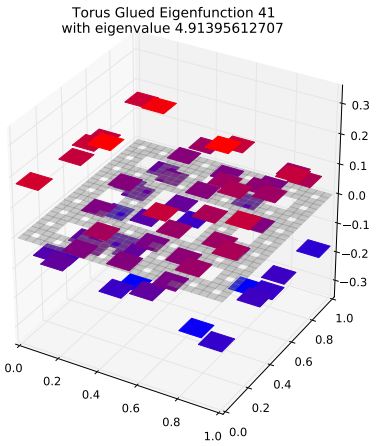
99 $M = 3$ Eigenfunction 98

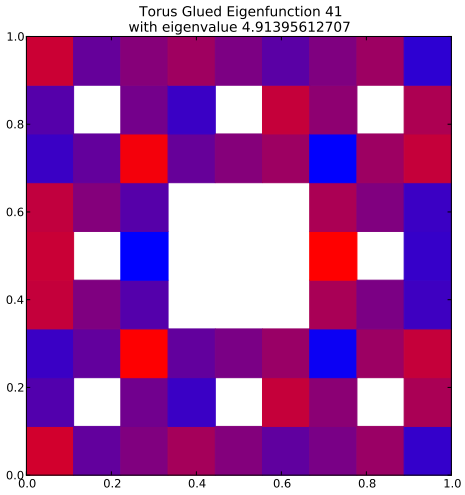
$M = 3$ Eigenfunction 98 has eigenvalue 2.01686159883





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

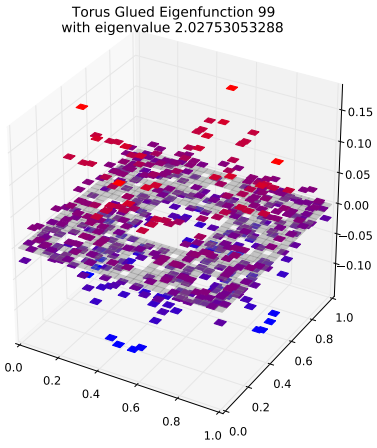


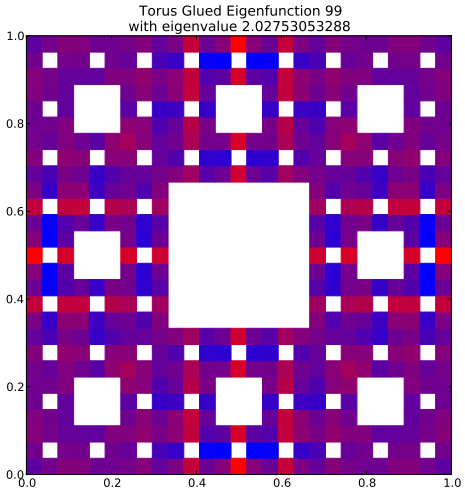


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.410435410222$
Dot Value: 0.4116516475148304

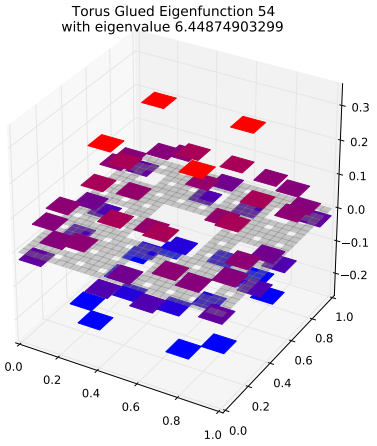
100 $M = 3$ Eigenfunction 99

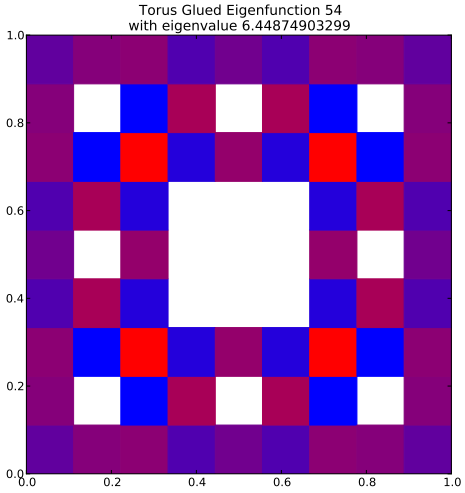
$M = 3$ Eigenfunction 99 has eigenvalue 2.02753053288





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

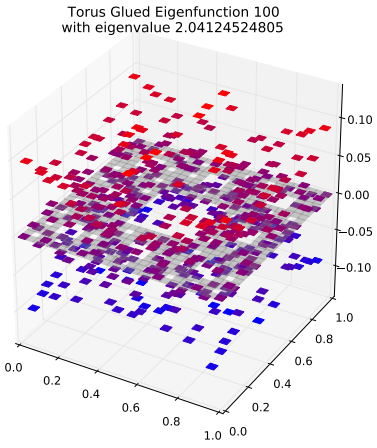


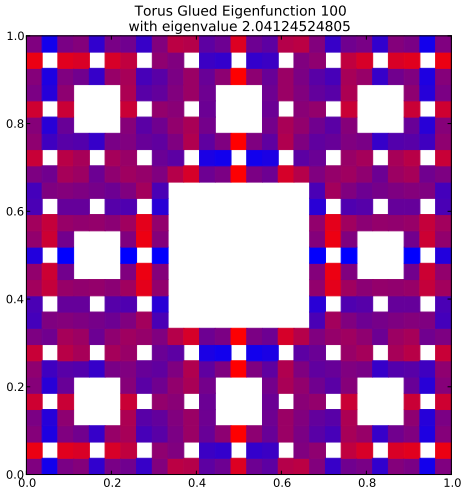


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.314406797737$
Dot Value: 0.16410341957356278

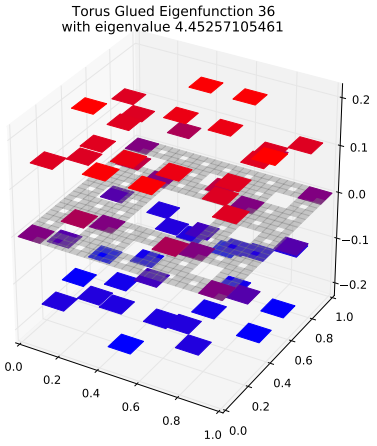
101 $M = 3$ Eigenfunction 100

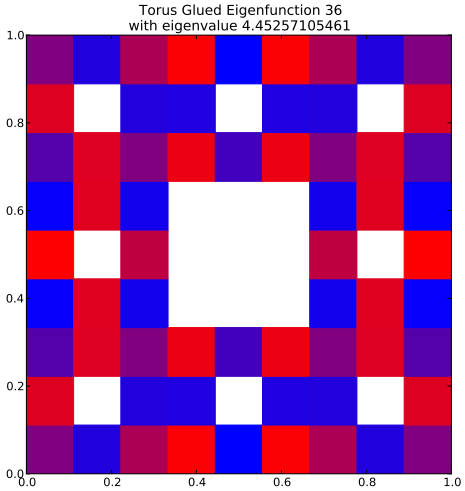
$M = 3$ Eigenfunction 100 has eigenvalue 2.04124524805





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

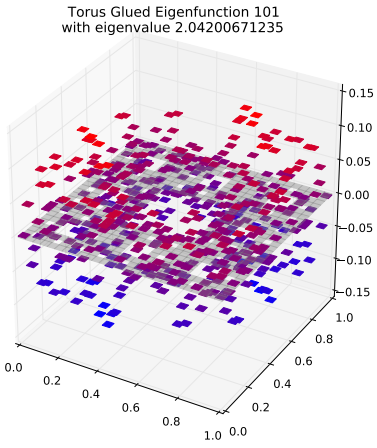


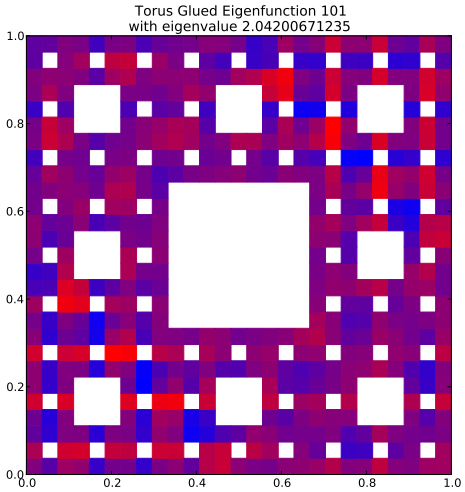


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.458441925579$
Dot Value: 0.37905712371340894

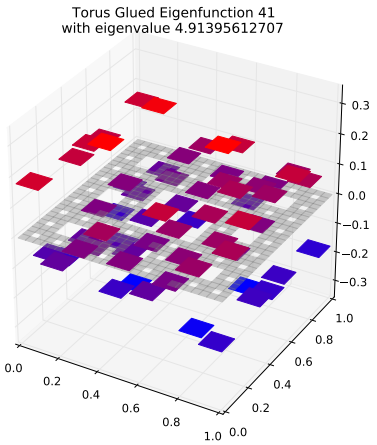
102 $M = 3$ Eigenfunction 101

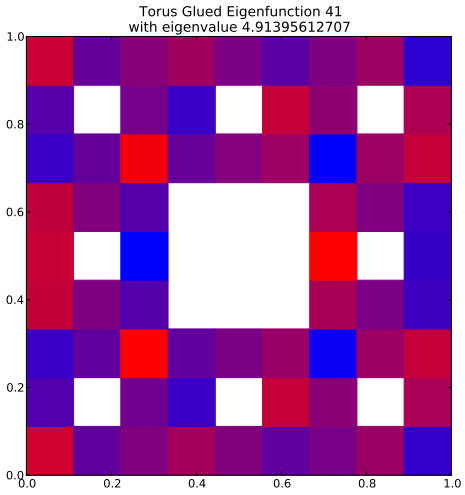
$M = 3$ Eigenfunction 101 has eigenvalue 2.04200671235





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

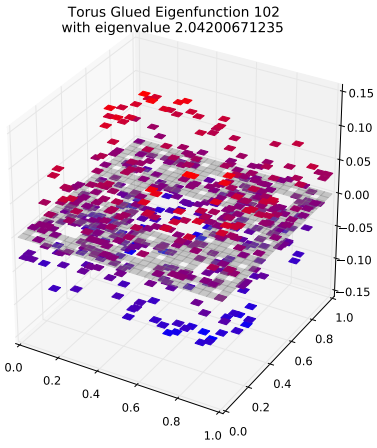


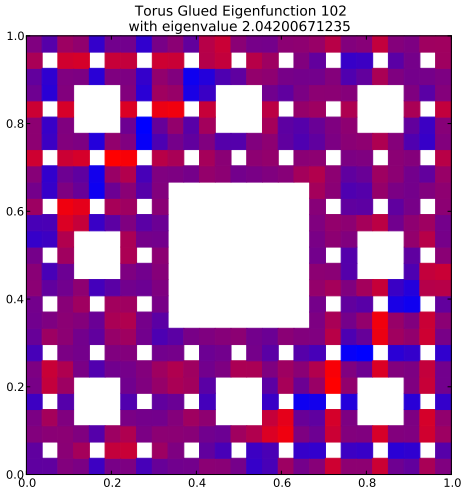


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.415552491626$
Dot Value: 0.52147061736122

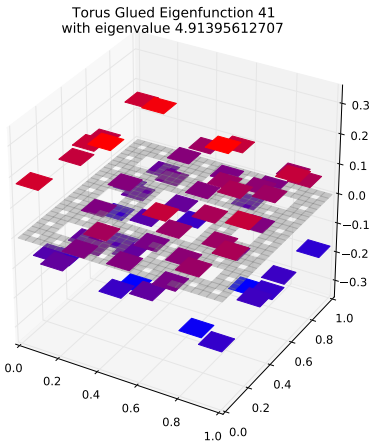
103 $M = 3$ Eigenfunction 102

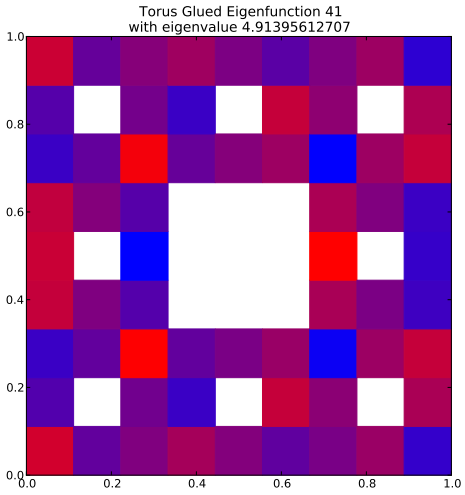
$M = 3$ Eigenfunction 102 has eigenvalue 2.04200671235





Compare to $m = 2$ eigenspace with eigenvalue 4.91395612707
(Note: Eigenspace Dimension > 1)

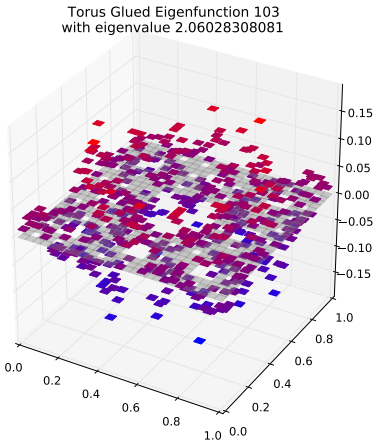


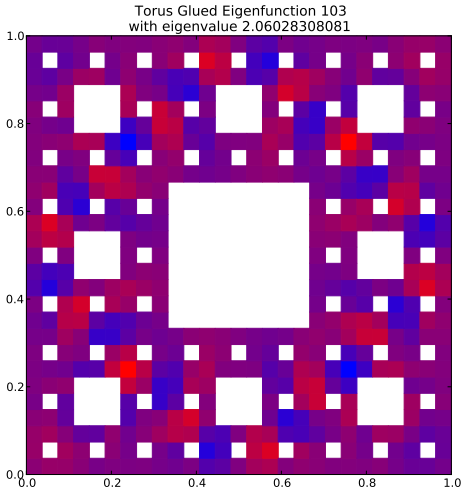


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.415552491626$
Dot Value: 0.5214706173612043

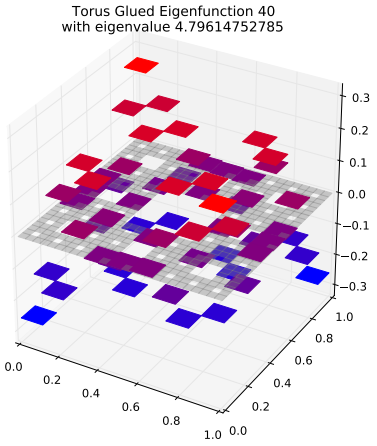
104 $M = 3$ Eigenfunction 103

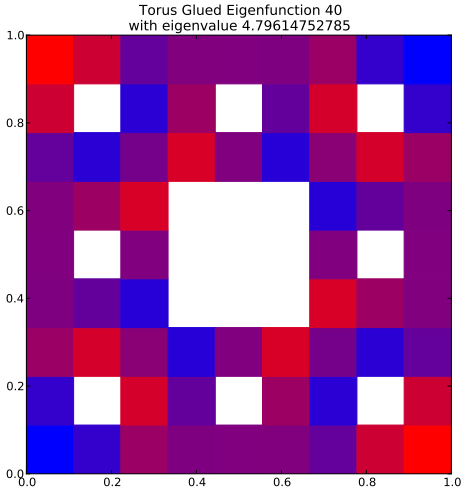
$M = 3$ Eigenfunction 103 has eigenvalue 2.06028308081





Compare to $m = 2$ eigenspace with eigenvalue 4.79614752785

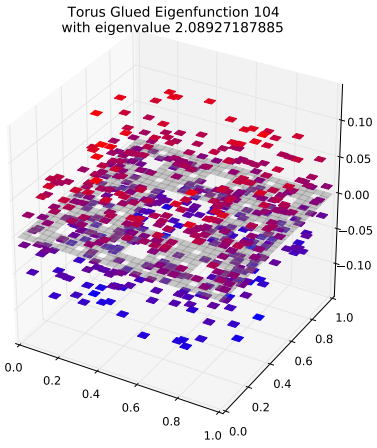


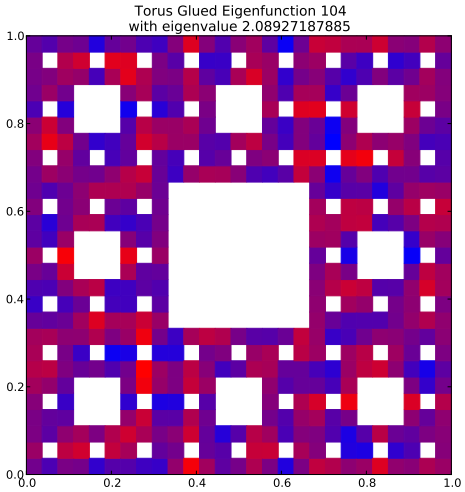


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.429570414348$
Dot Value: 0.4276244967401124

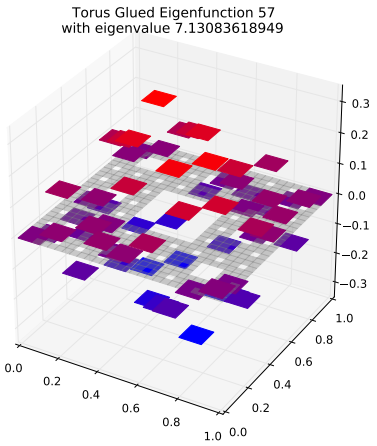
105 $M = 3$ Eigenfunction 104

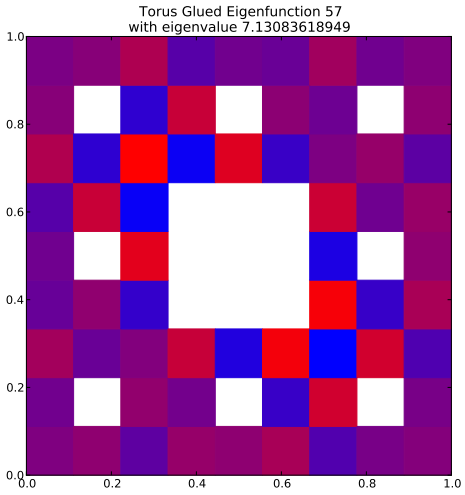
$M = 3$ Eigenfunction 104 has eigenvalue 2.08927187885





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

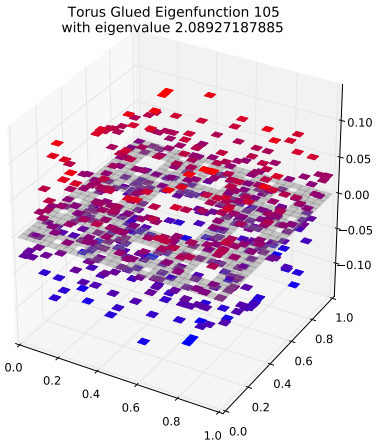


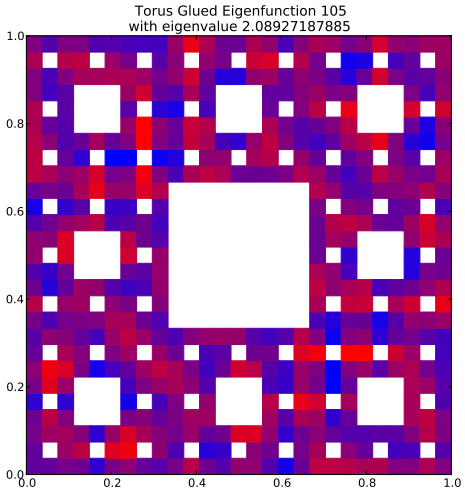


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.292991147648$
Dot Value: 0.29308358151857883

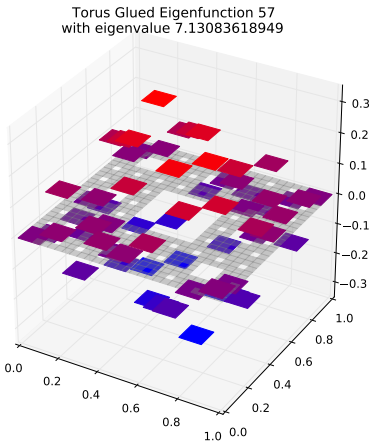
106 $M = 3$ Eigenfunction 105

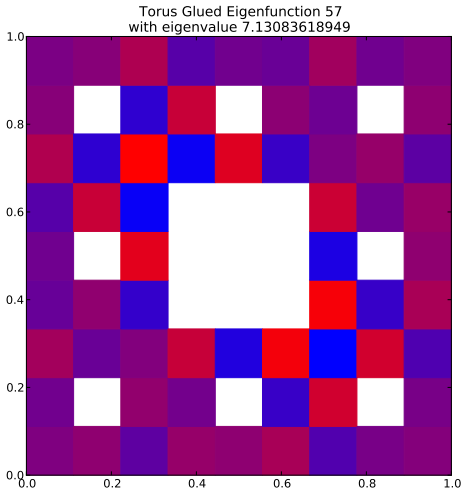
$M = 3$ Eigenfunction 105 has eigenvalue 2.08927187885





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

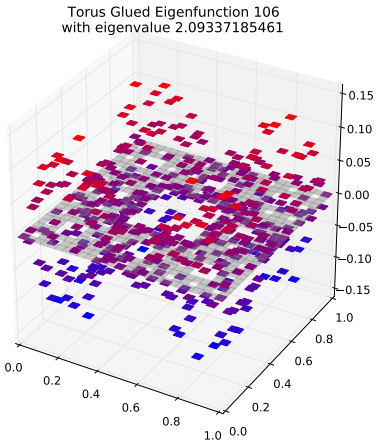


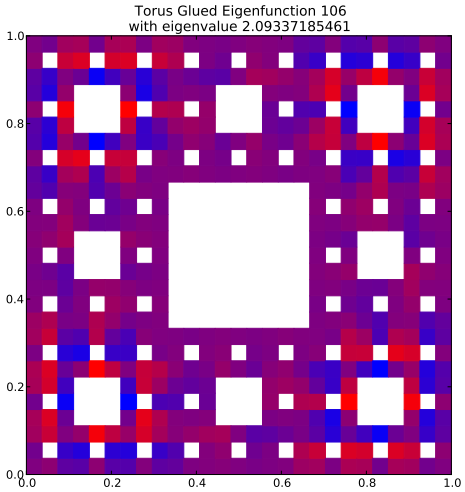


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.292991147648$
Dot Value: 0.29308358151858693

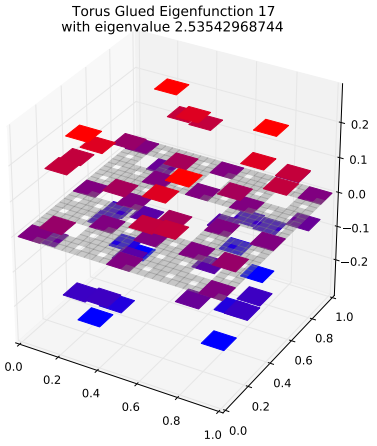
107 $M = 3$ Eigenfunction 106

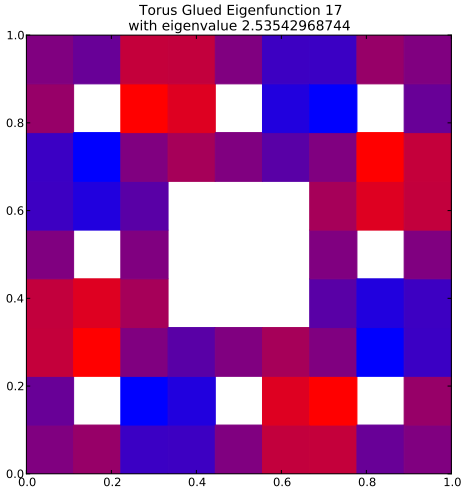
$M = 3$ Eigenfunction 106 has eigenvalue 2.09337185461





Compare to $m = 2$ eigenspace with eigenvalue 2.53542968744

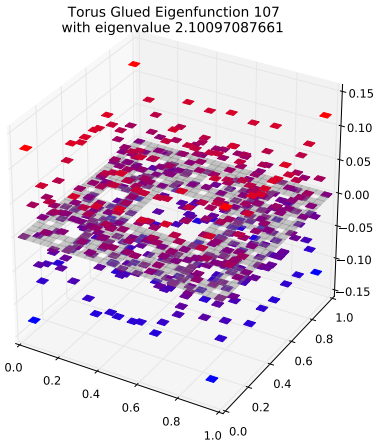


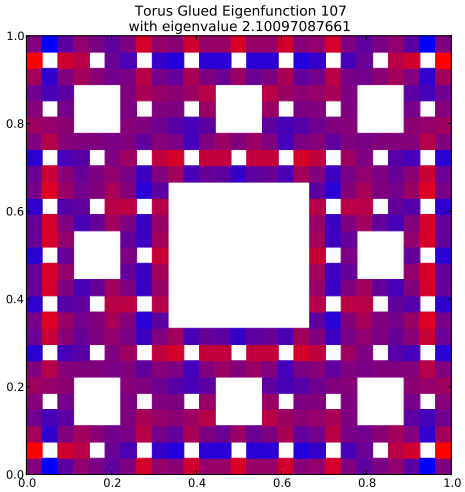


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.825647764946$
Dot Value: 0.38061445528256077

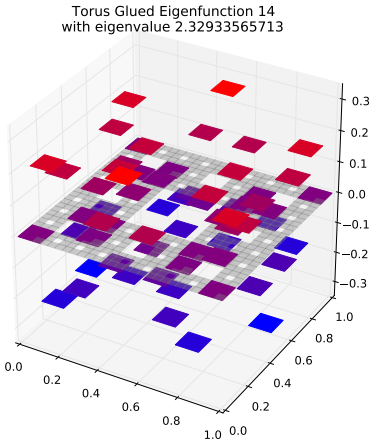
108 $M = 3$ Eigenfunction 107

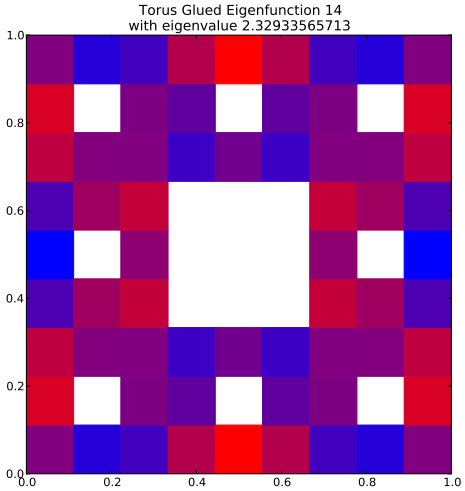
$M = 3$ Eigenfunction 107 has eigenvalue 2.10097087661





Compare to $m = 2$ eigenspace with eigenvalue 2.32933565713

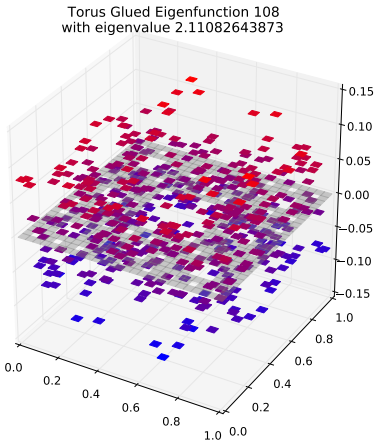


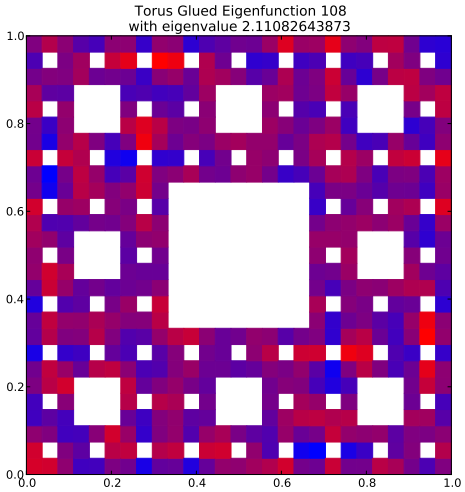


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.901961411264$
Dot Value: 0.24165795015115898

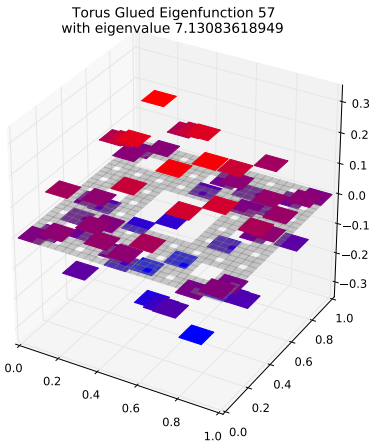
109 $M = 3$ Eigenfunction 108

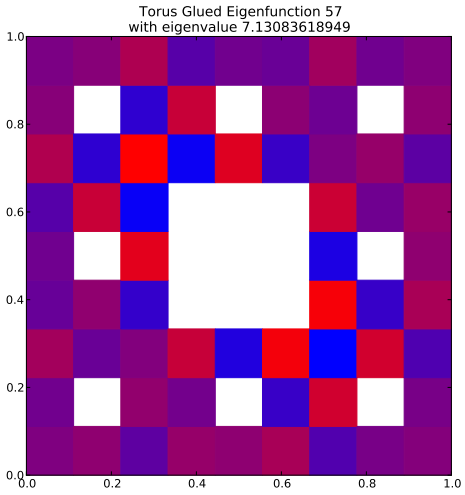
$M = 3$ Eigenfunction 108 has eigenvalue 2.11082643873





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

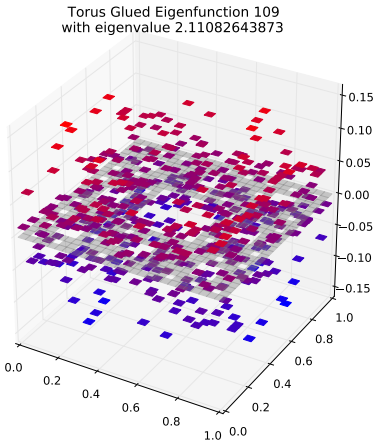


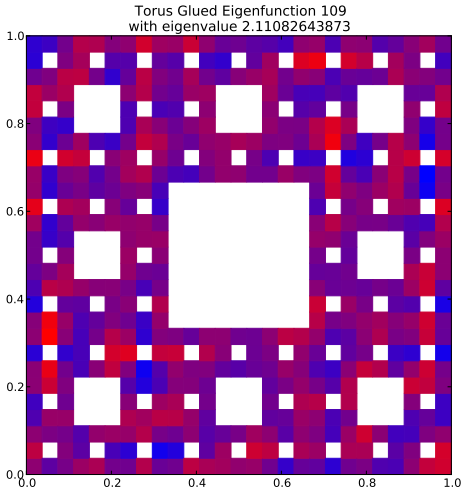


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.296013873077$
Dot Value: 0.32828272622951415

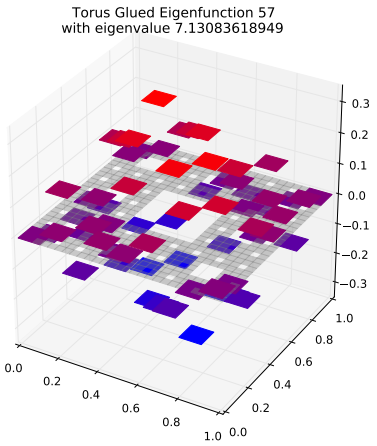
110 $M = 3$ Eigenfunction 109

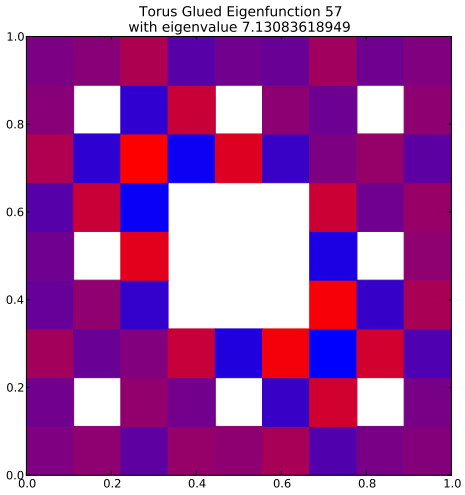
$M = 3$ Eigenfunction 109 has eigenvalue 2.11082643873





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

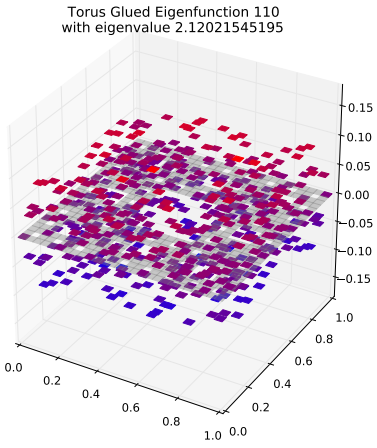


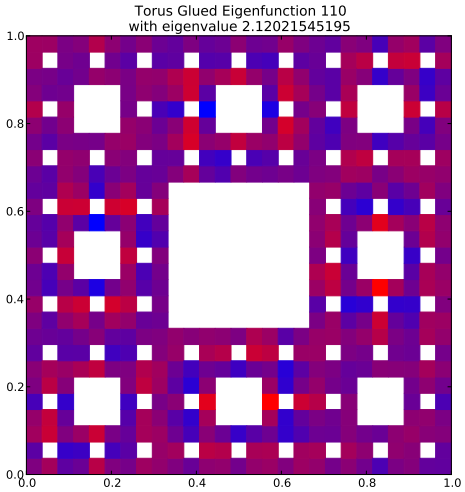


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.296013873077$
Dot Value: 0.32828272622951993

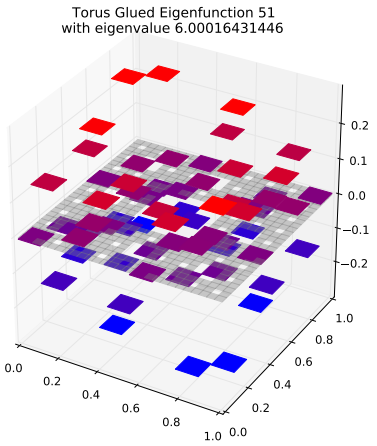
111 $M = 3$ Eigenfunction 110

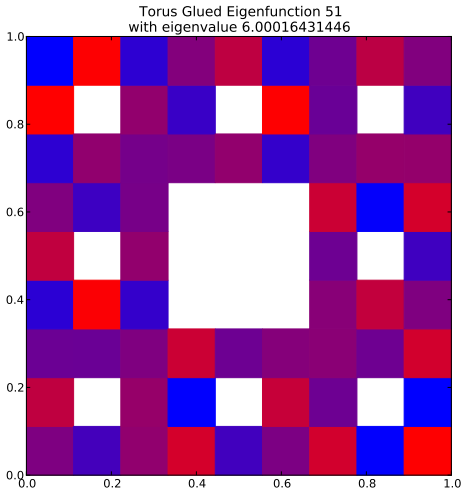
$M = 3$ Eigenfunction 110 has eigenvalue 2.12021545195





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

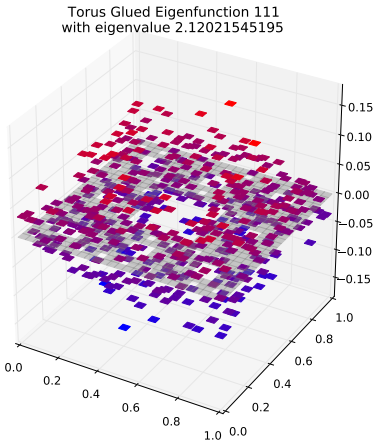


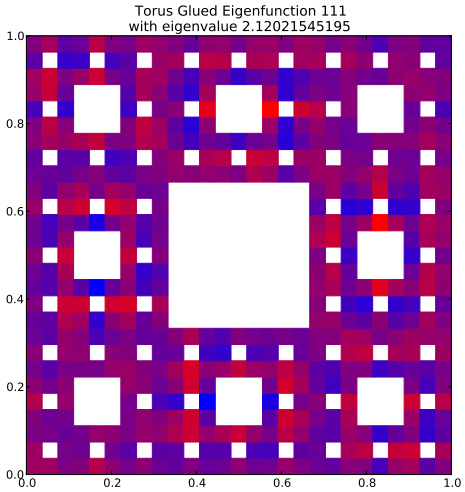


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.353359564977$
Dot Value: 0.4771318891549776

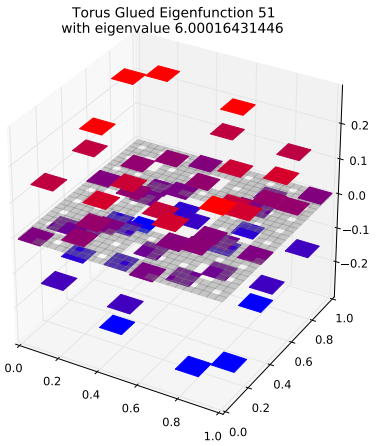
112 $M = 3$ Eigenfunction 111

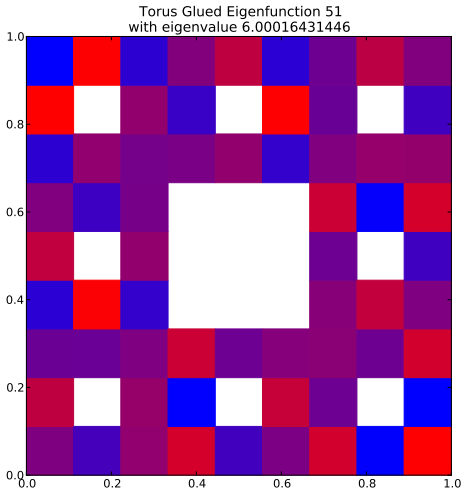
$M = 3$ Eigenfunction 111 has eigenvalue 2.12021545195





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

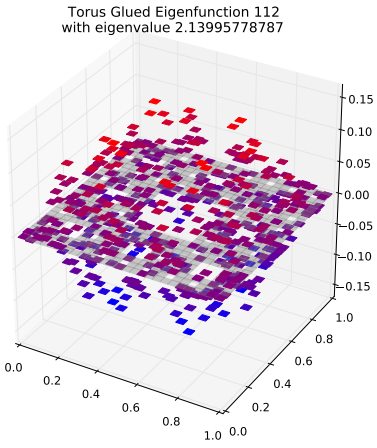


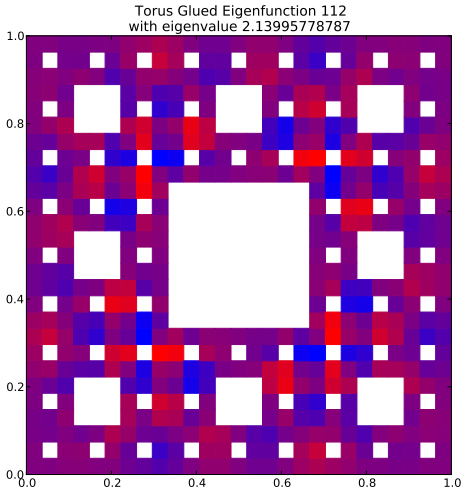


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.353359564977$
Dot Value: 0.4771318891549884

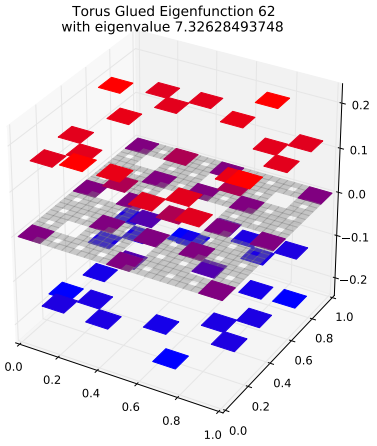
113 $M = 3$ Eigenfunction 112

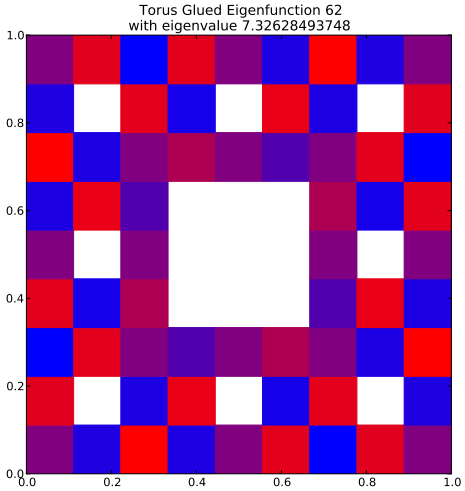
$M = 3$ Eigenfunction 112 has eigenvalue 2.13995778787





Compare to $m = 2$ eigenspace with eigenvalue 7.32628493748

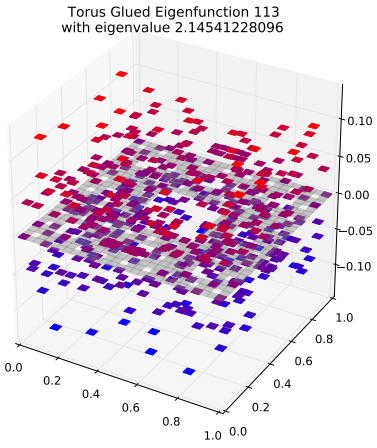


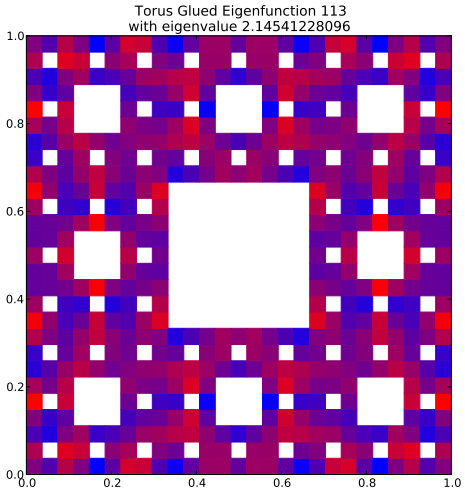


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.292093169476$
Dot Value: 0.08486962059472325

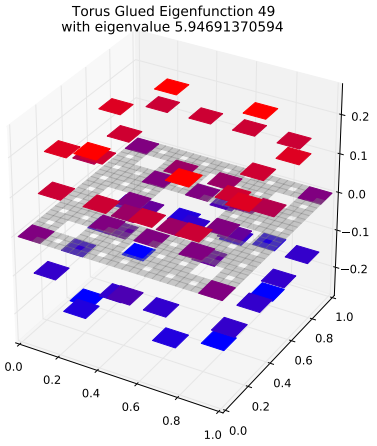
114 $M = 3$ Eigenfunction 113

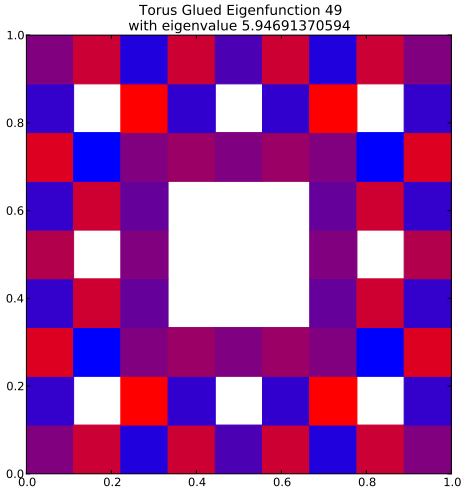
$M = 3$ Eigenfunction 113 has eigenvalue 2.14541228096





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

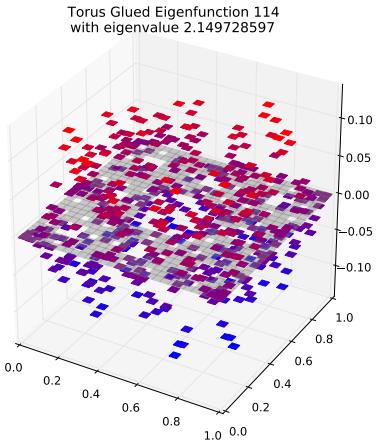


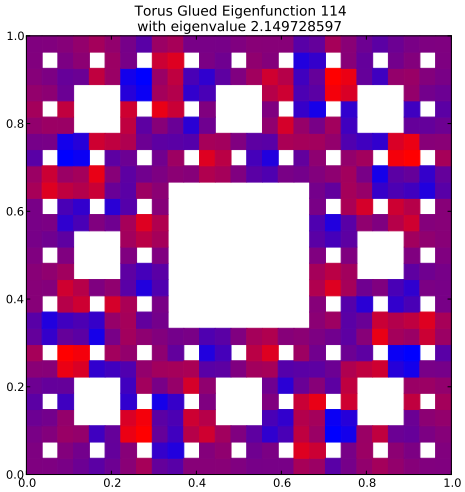


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.360760620895$
Dot Value: 0.23057693375417443

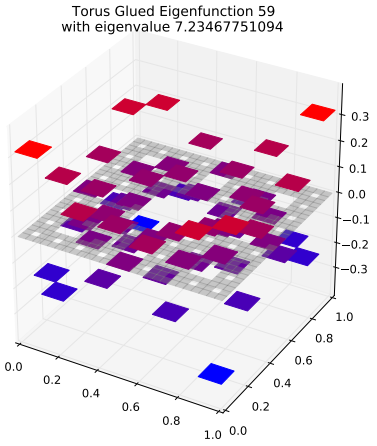
115 $M = 3$ Eigenfunction 114

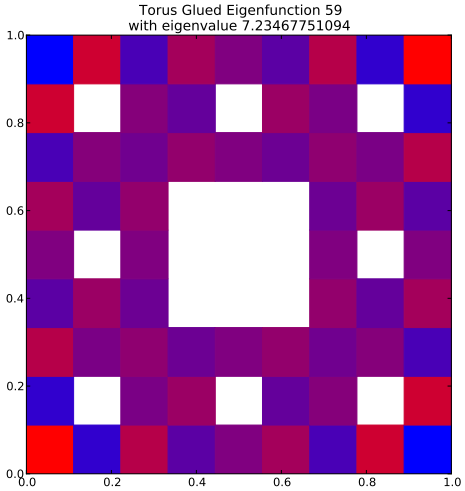
$M = 3$ Eigenfunction 114 has eigenvalue 2.149728597





Compare to $m = 2$ eigenspace with eigenvalue 7.23467751094

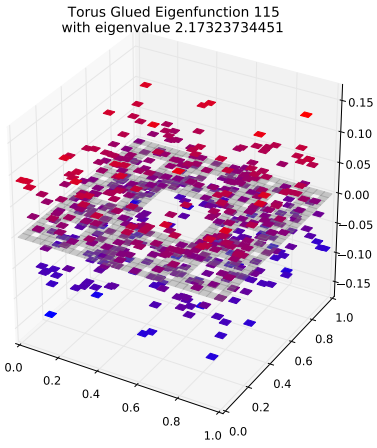


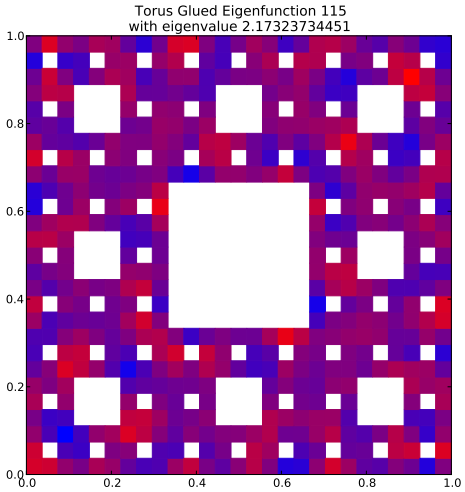


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.29714228364$
Dot Value: 0.2789820387668619

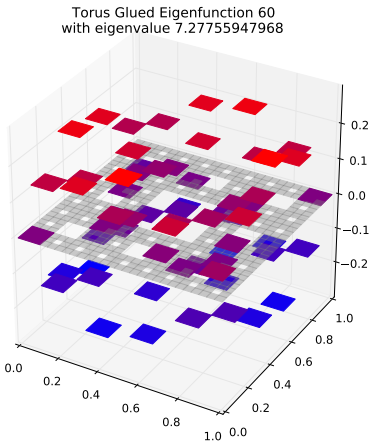
116 $M = 3$ Eigenfunction 115

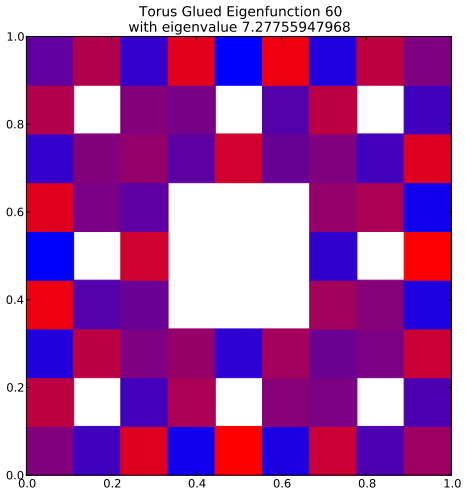
$M = 3$ Eigenfunction 115 has eigenvalue 2.17323734451





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

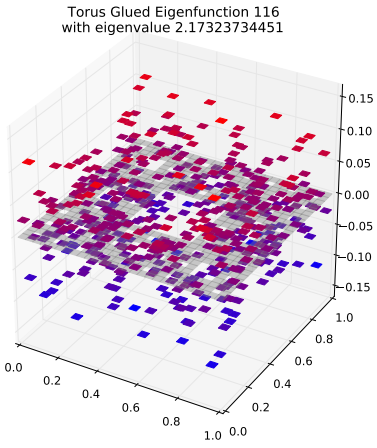


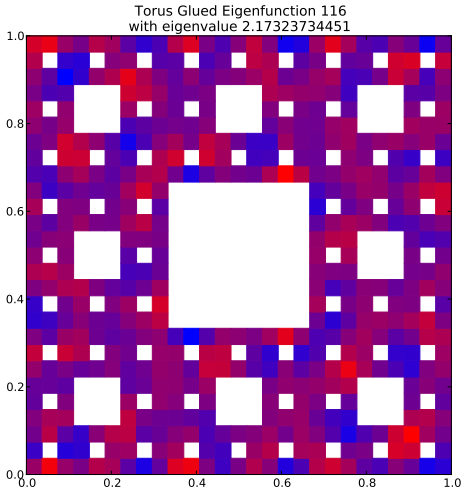


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.298621722101$
Dot Value: 0.2622422145619987

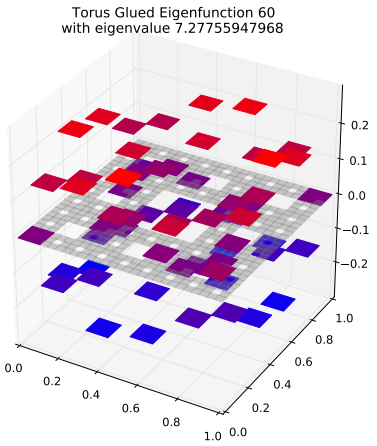
117 $M = 3$ Eigenfunction 116

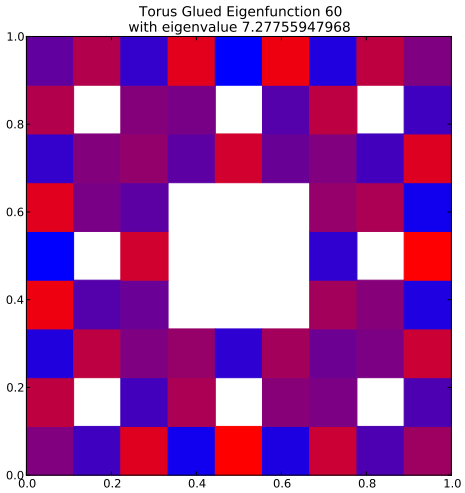
$M = 3$ Eigenfunction 116 has eigenvalue 2.17323734451





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

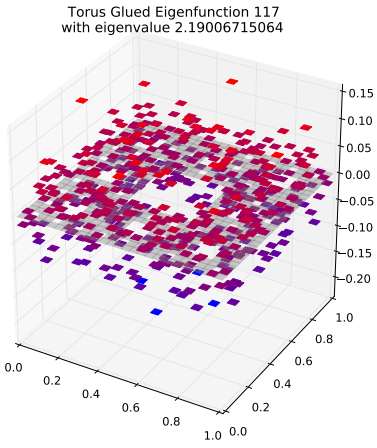


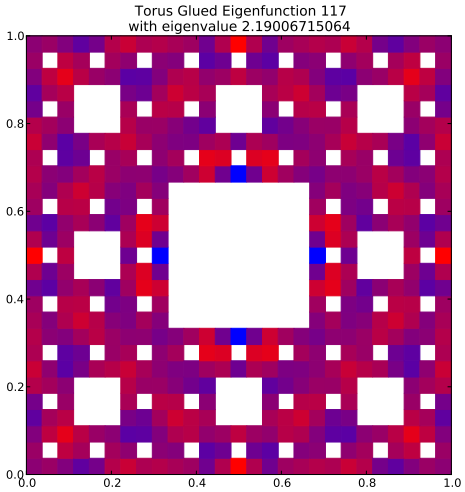


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.298621722101$
Dot Value: 0.2622422145619857

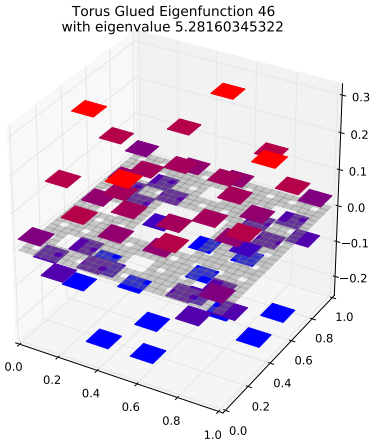
118 $M = 3$ Eigenfunction 117

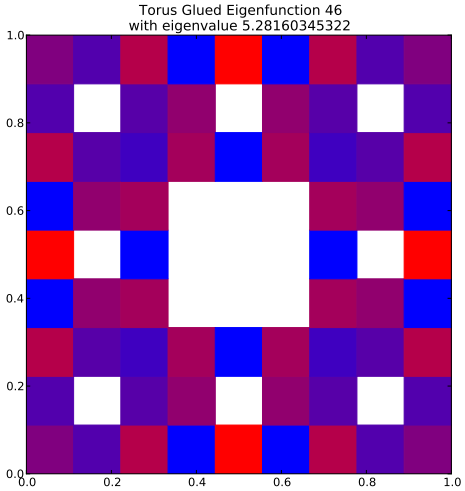
$M = 3$ Eigenfunction 117 has eigenvalue 2.19006715064





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

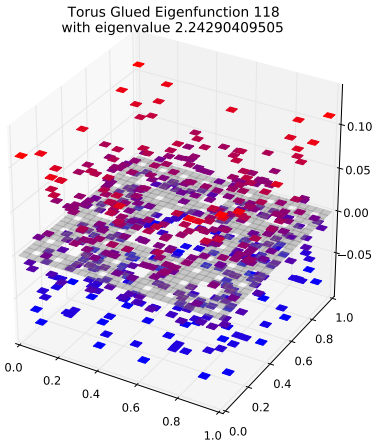


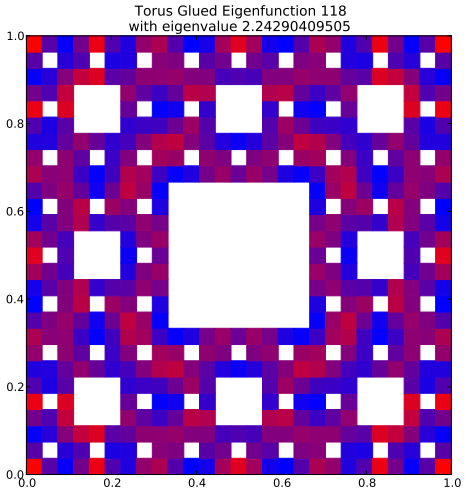


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.414659519602$
Dot Value: 0.419382160783907

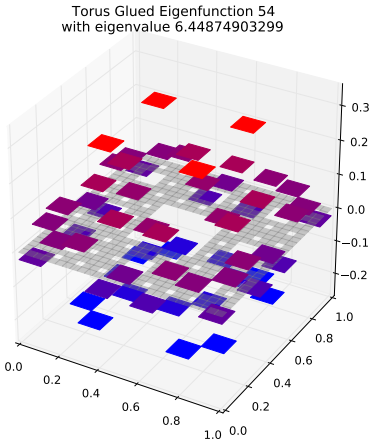
119 $M = 3$ Eigenfunction 118

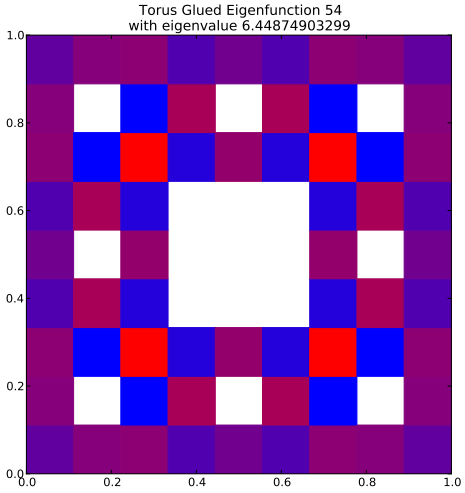
$M = 3$ Eigenfunction 118 has eigenvalue 2.24290409505





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

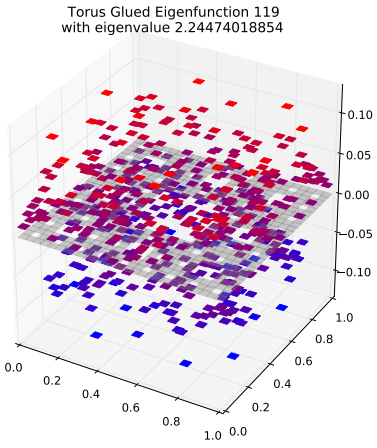


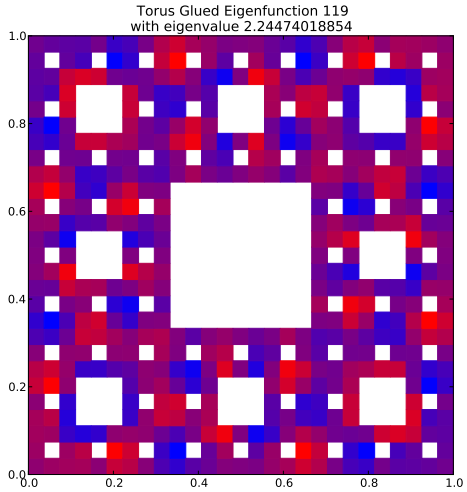


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.347804525121$
Dot Value: 0.3114606670199669

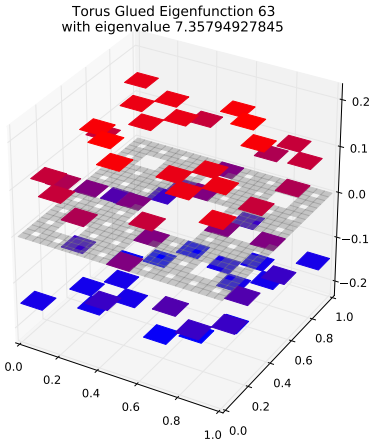
120 $M = 3$ Eigenfunction 119

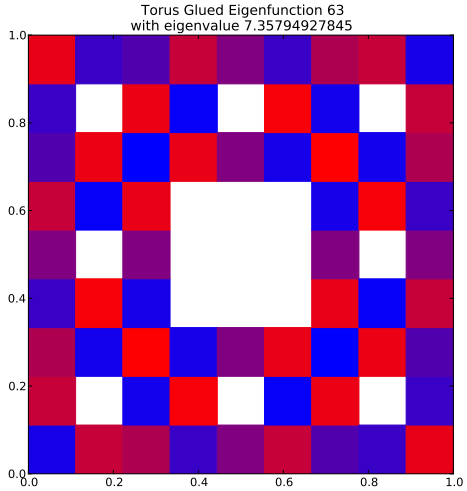
$M = 3$ Eigenfunction 119 has eigenvalue 2.24474018854





Compare to $m = 2$ eigenspace with eigenvalue 7.35794927845

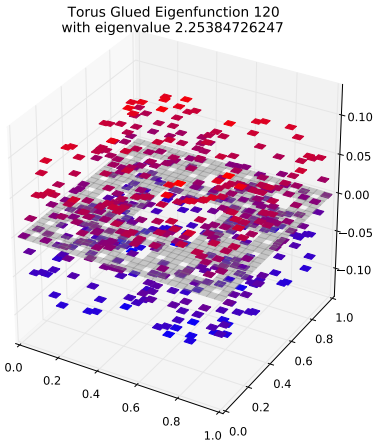


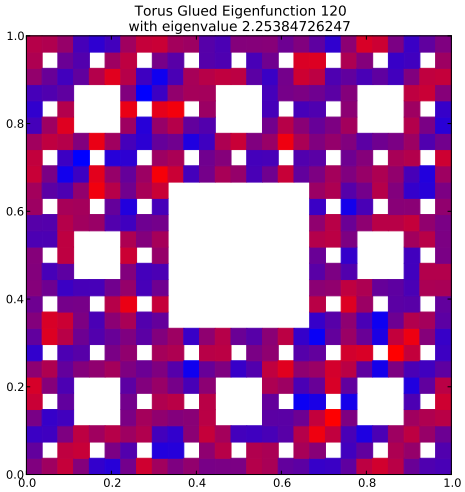


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.30507687721$
Dot Value: 0.36987355376075104

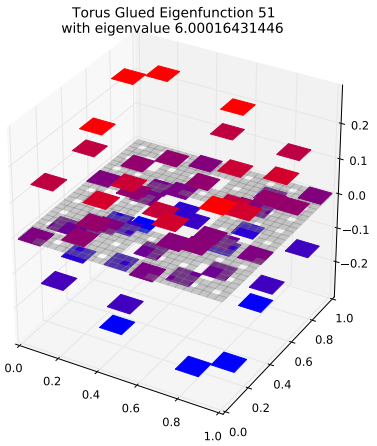
121 $M = 3$ Eigenfunction 120

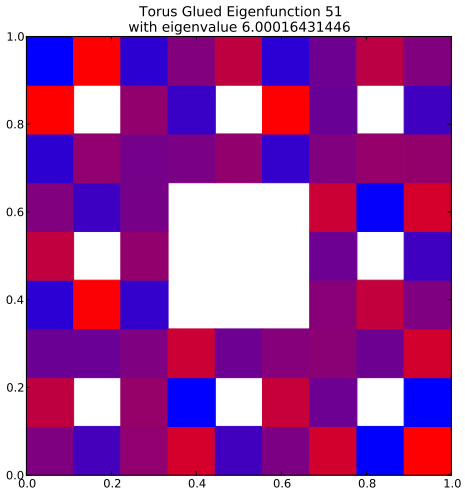
$M = 3$ Eigenfunction 120 has eigenvalue 2.25384726247





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

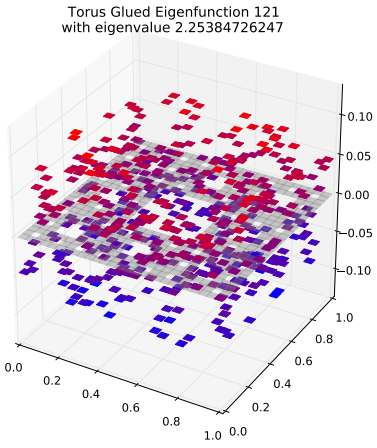


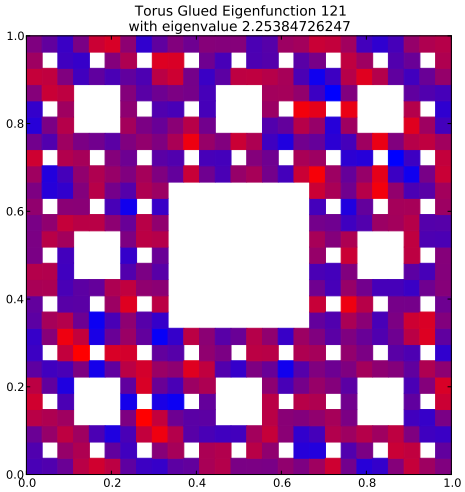


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.375630923479$
Dot Value: 0.28845241234581565

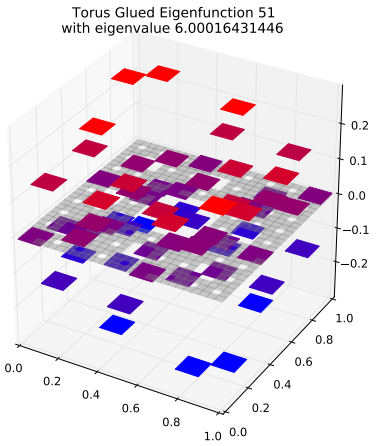
122 $M = 3$ Eigenfunction 121

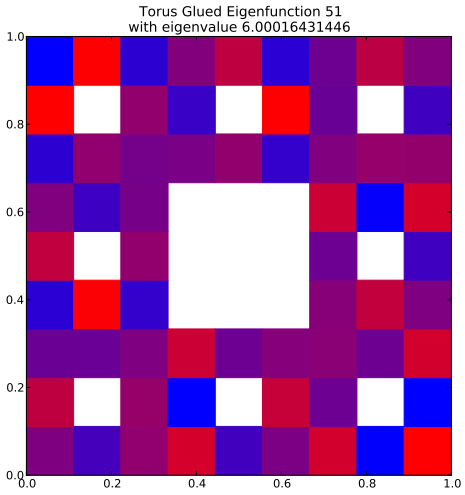
$M = 3$ Eigenfunction 121 has eigenvalue 2.25384726247





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

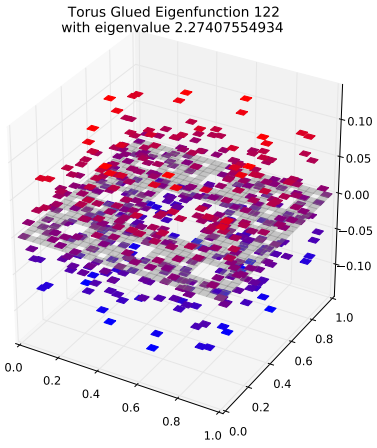


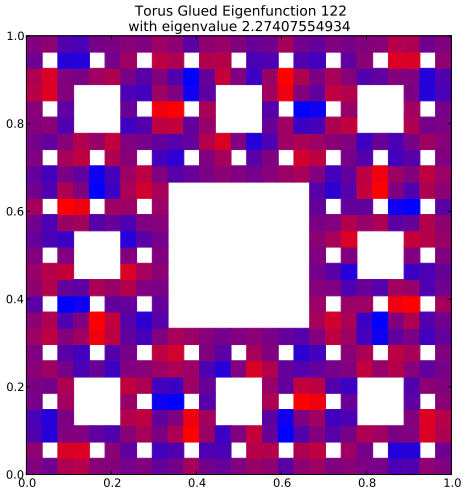


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.375630923479$
Dot Value: 0.28845241234581576

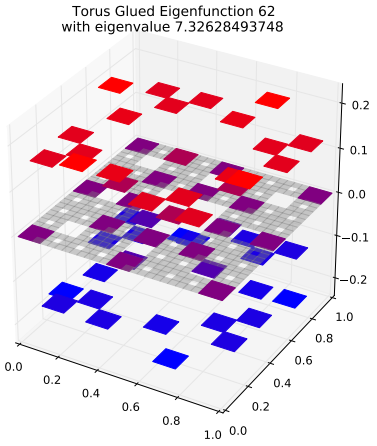
123 $M = 3$ Eigenfunction 122

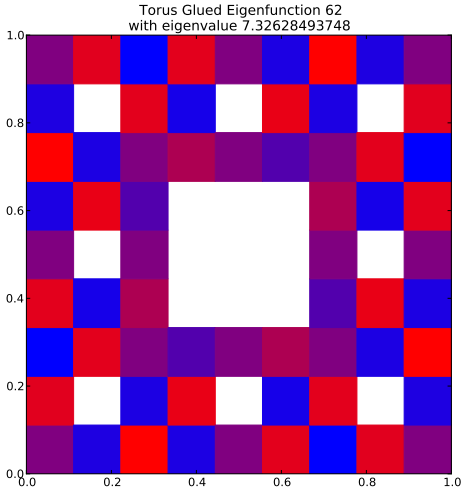
$M = 3$ Eigenfunction 122 has eigenvalue 2.27407554934





Compare to $m = 2$ eigenspace with eigenvalue 7.32628493748

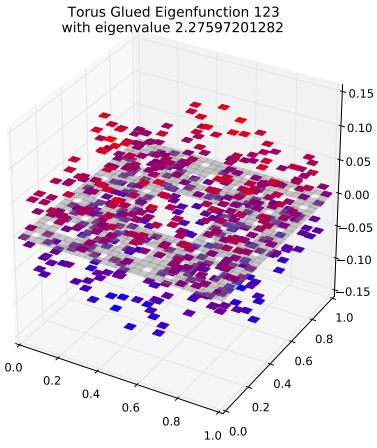


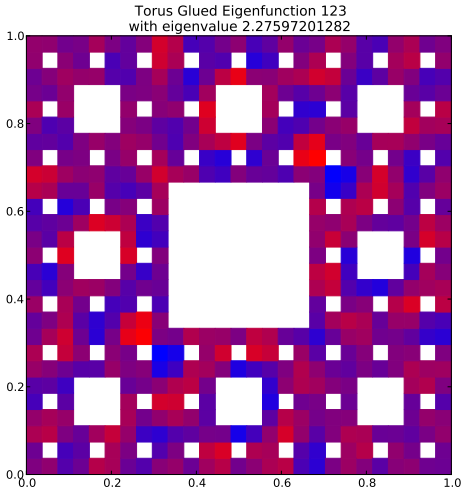


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.310399550214$
Dot Value: 0.1694249910116301

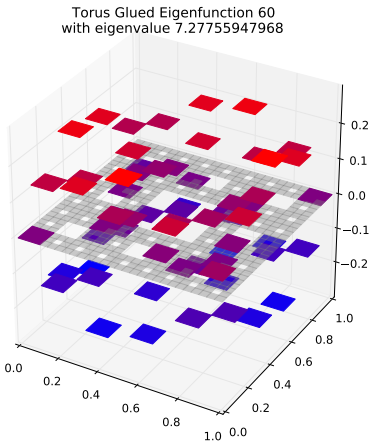
124 $M = 3$ Eigenfunction 123

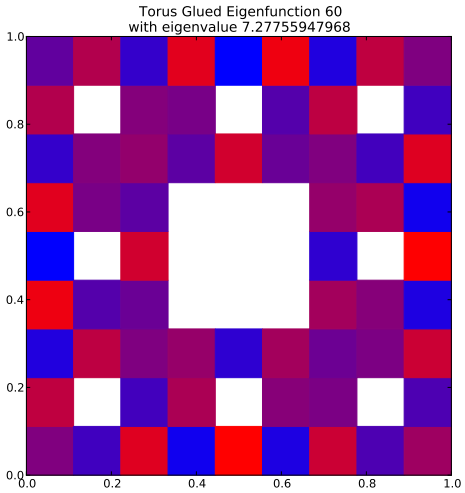
$M = 3$ Eigenfunction 123 has eigenvalue 2.27597201282





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

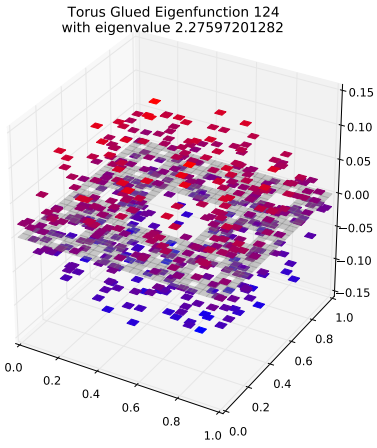


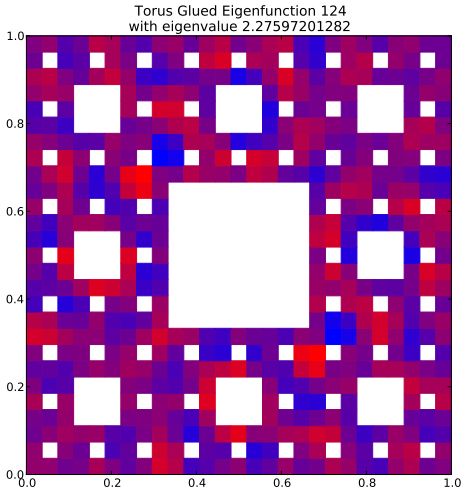


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.312738359498$
Dot Value: 0.5037673660506381

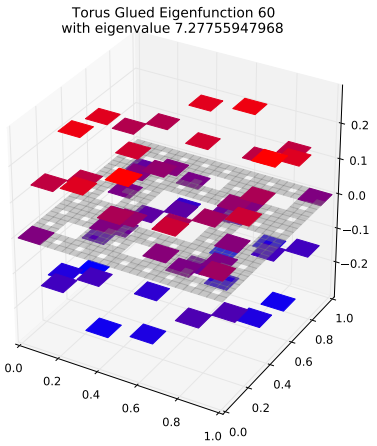
125 $M = 3$ Eigenfunction 124

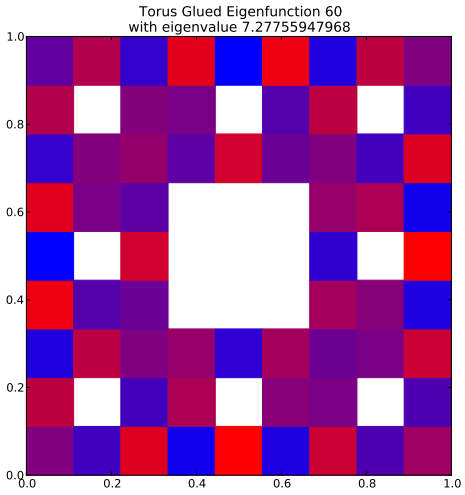
$M = 3$ Eigenfunction 124 has eigenvalue 2.27597201282





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

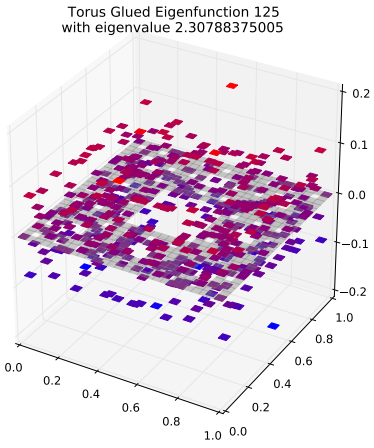


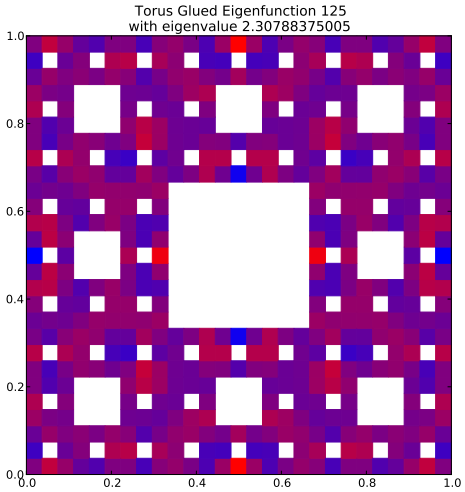


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.312738359498$
Dot Value: 0.503767366050631

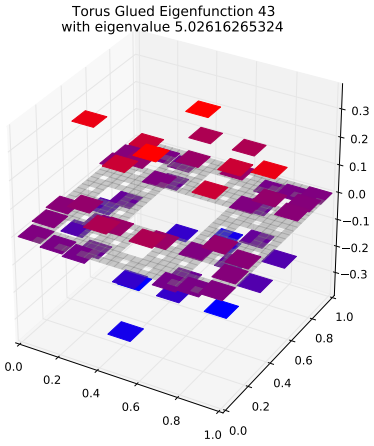
126 $M = 3$ Eigenfunction 125

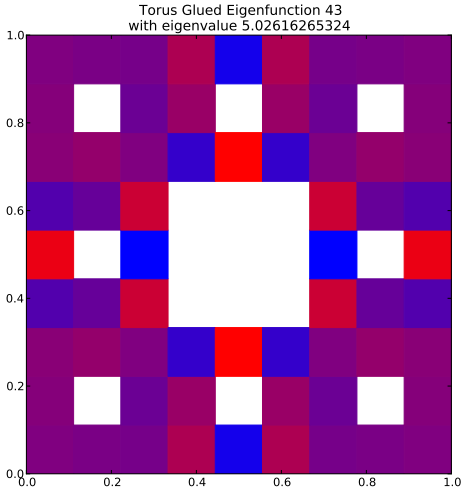
$M = 3$ Eigenfunction 125 has eigenvalue 2.30788375005





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

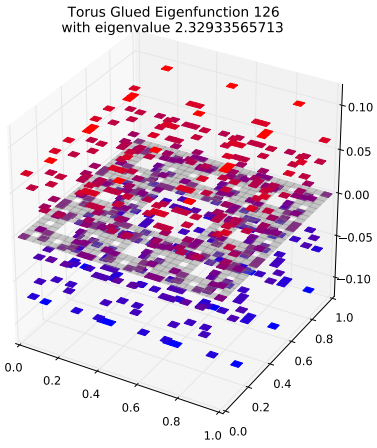


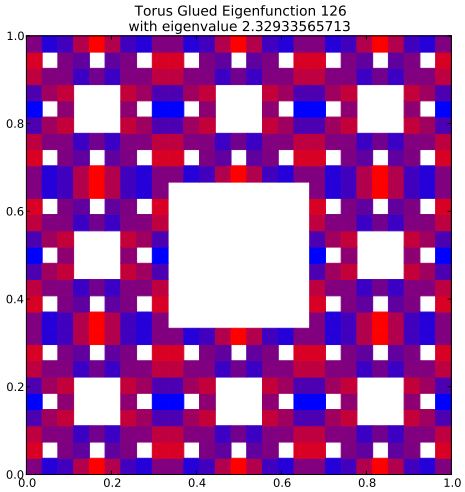


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.45917410742$
Dot Value: 0.05099872962467267

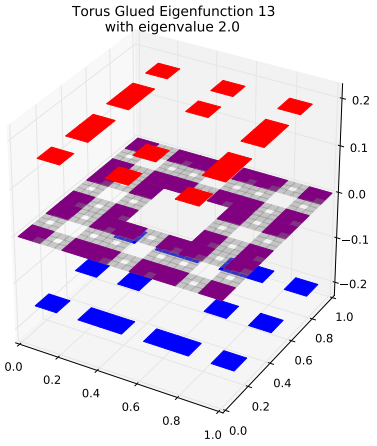
127 $M = 3$ Eigenfunction 126

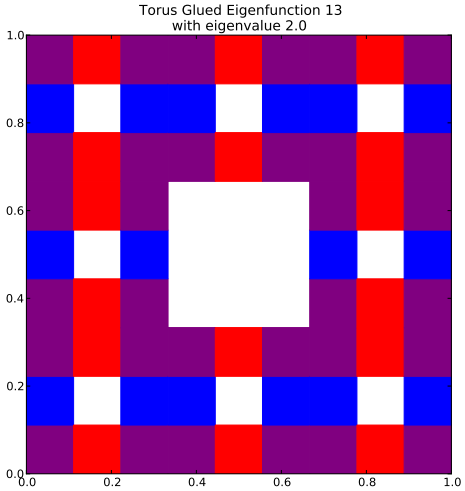
$M = 3$ Eigenfunction 126 has eigenvalue 2.32933565713





Compare to $m = 2$ eigenspace with eigenvalue 2.0

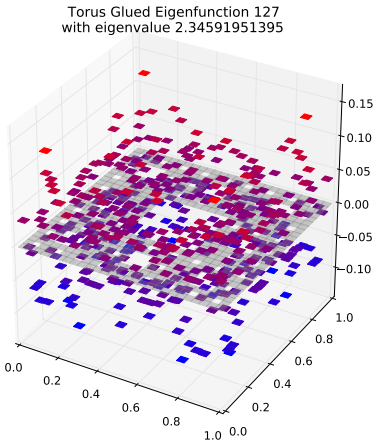


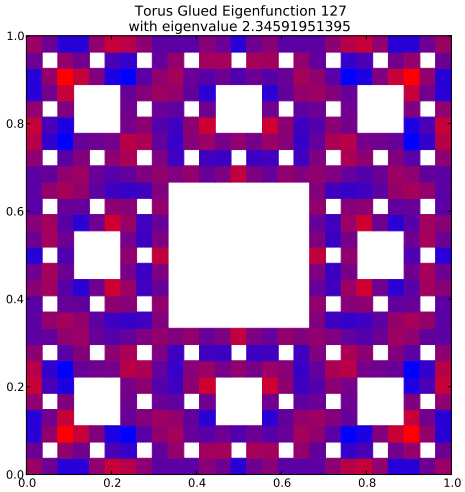


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.16466782857$
Dot Value: 0.0

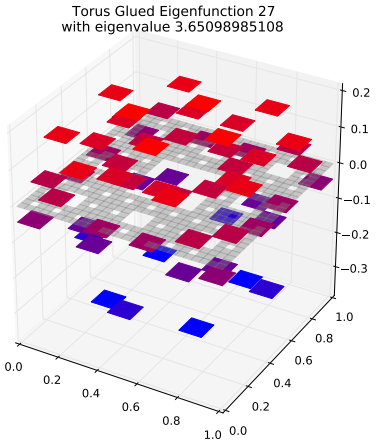
128 $M = 3$ Eigenfunction 127

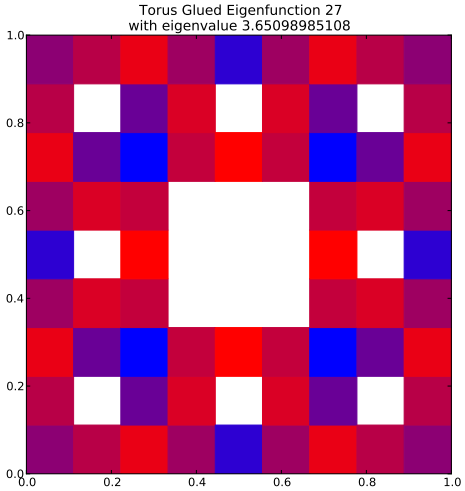
$M = 3$ Eigenfunction 127 has eigenvalue 2.34591951395





Compare to $m = 2$ eigenspace with eigenvalue 3.65098985108

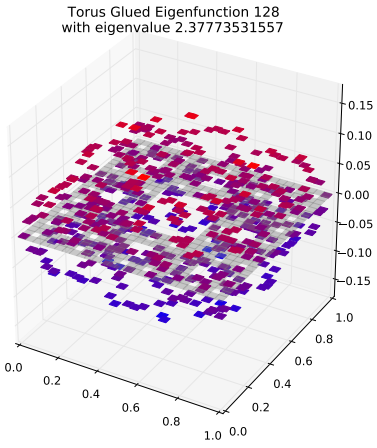


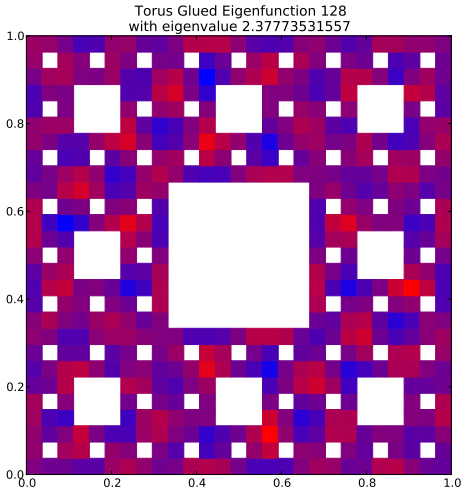


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.642543422369$
Dot Value: 0.3462163107241297

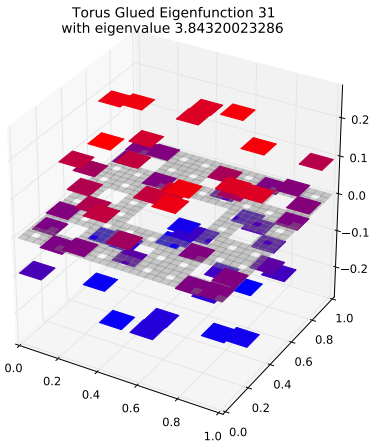
129 $M = 3$ Eigenfunction 128

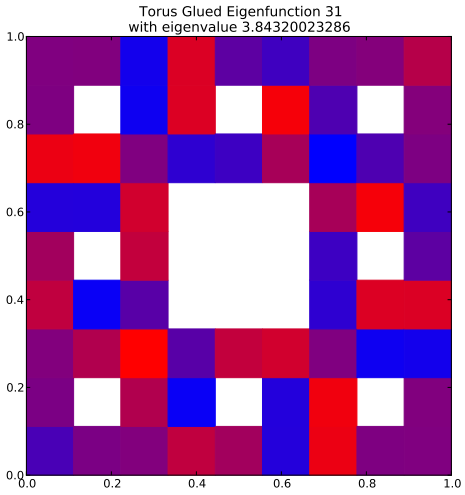
$M = 3$ Eigenfunction 128 has eigenvalue 2.37773531557





Compare to $m = 2$ eigenspace with eigenvalue 3.84320023286
(Note: Eigenspace Dimension > 1)

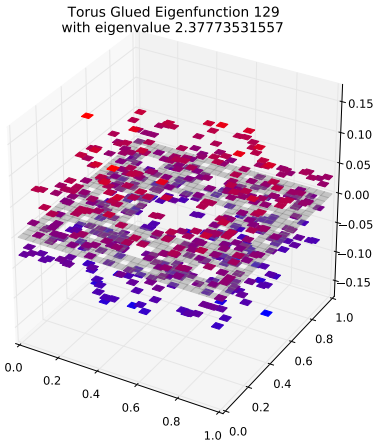


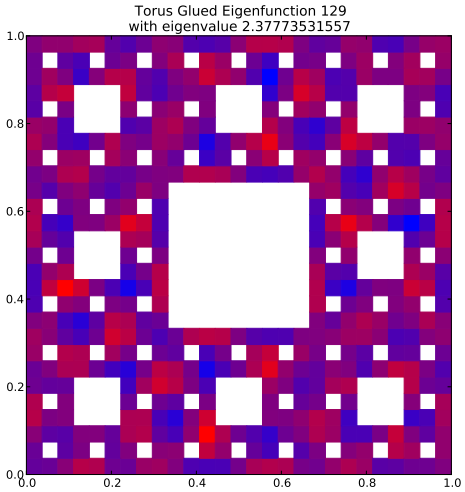


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.618686295666$
Dot Value: 0.4241657792782907

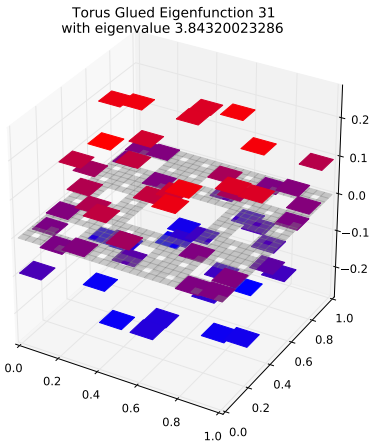
130 $M = 3$ Eigenfunction 129

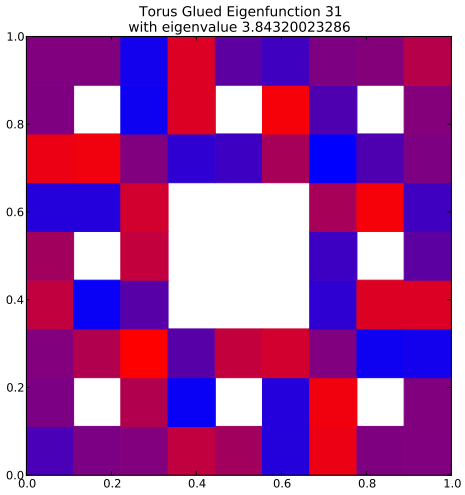
$M = 3$ Eigenfunction 129 has eigenvalue 2.37773531557





Compare to $m = 2$ eigenspace with eigenvalue 3.84320023286
(Note: Eigenspace Dimension > 1)

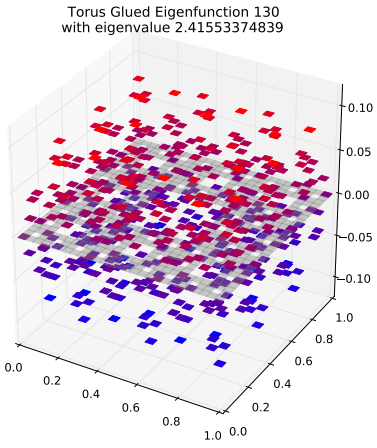


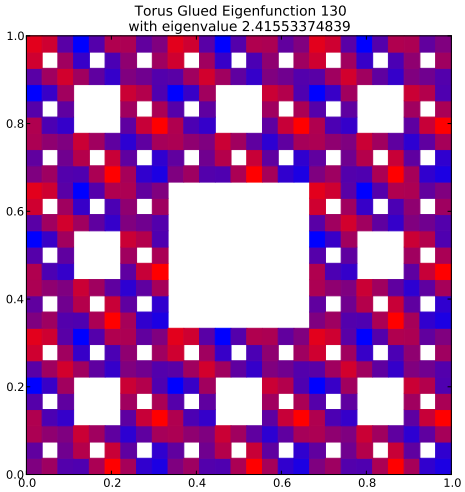


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.618686295666$
Dot Value: 0.4241657792782906

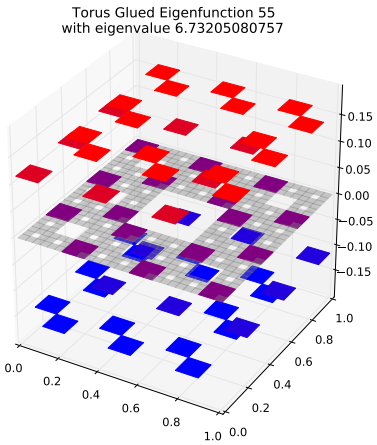
131 $M = 3$ Eigenfunction 130

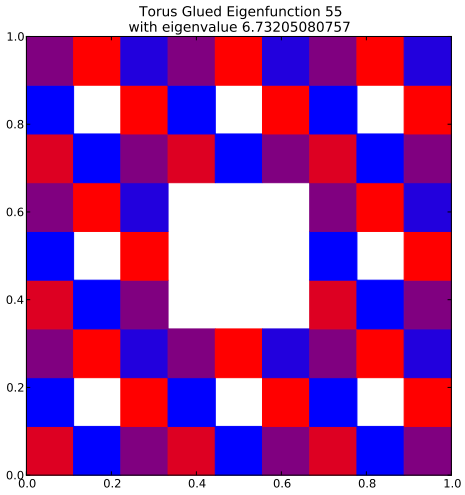
$M = 3$ Eigenfunction 130 has eigenvalue 2.41553374839





Compare to $m = 2$ eigenspace with eigenvalue 6.73205080757
(Note: Eigenspace Dimension > 1)

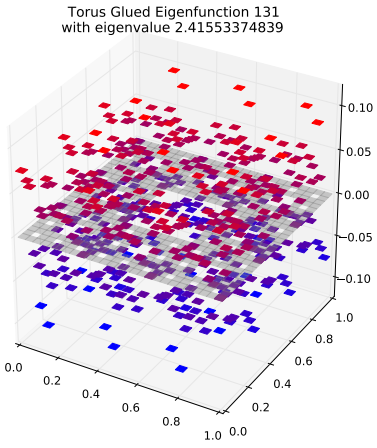


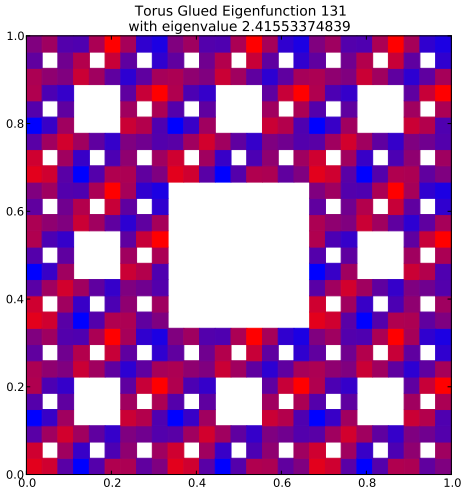


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.358810980106$
Dot Value: 0.0114406729028871 95

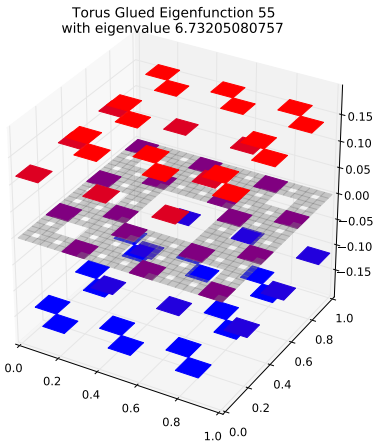
132 $M = 3$ Eigenfunction 131

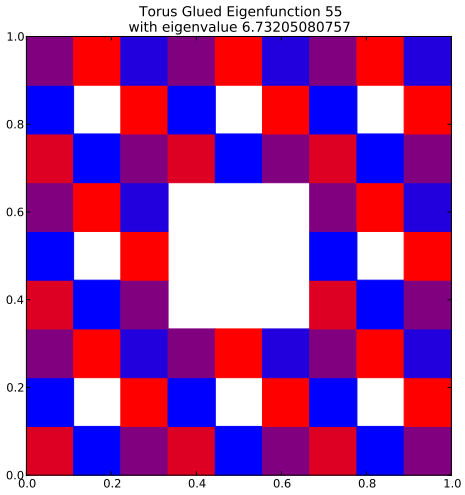
$M = 3$ Eigenfunction 131 has eigenvalue 2.41553374839





Compare to $m = 2$ eigenspace with eigenvalue 6.73205080757
(Note: Eigenspace Dimension > 1)

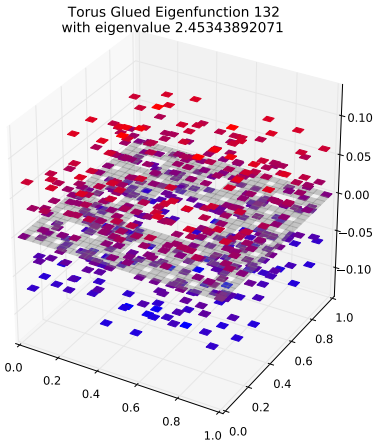


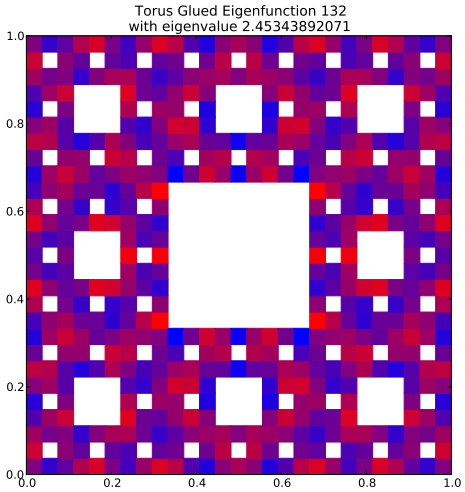


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.358810980106$
Dot Value: 0.011440672902887083

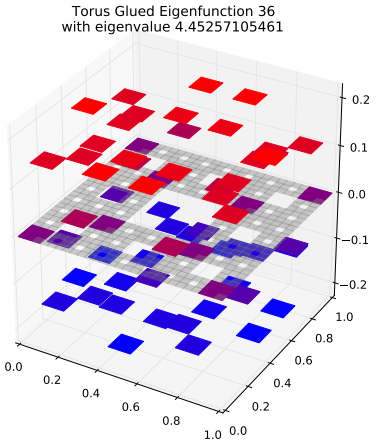
133 $M = 3$ Eigenfunction 132

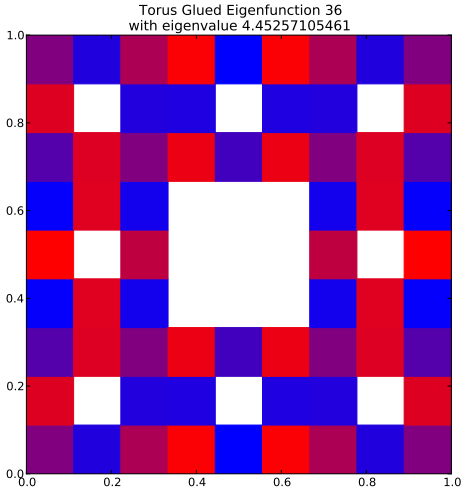
$M = 3$ Eigenfunction 132 has eigenvalue 2.45343892071





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

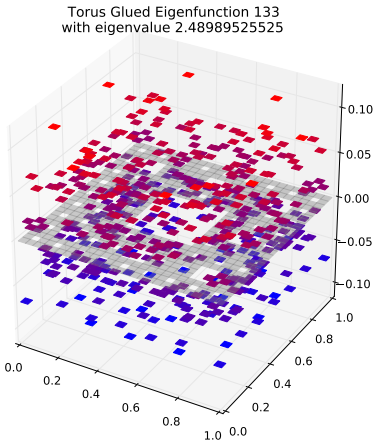


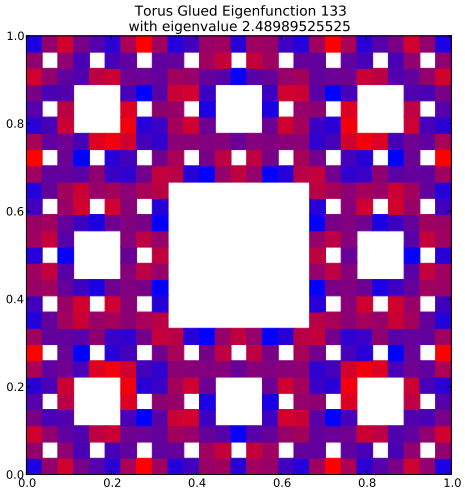


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.551016230988$
Dot Value: 0.3254834576952824

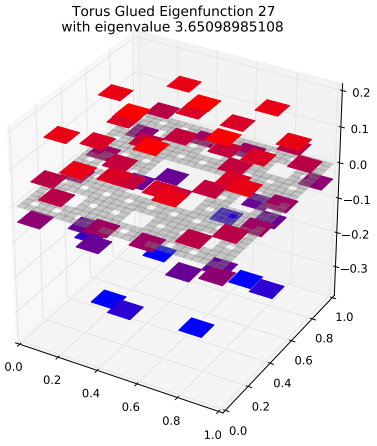
134 $M = 3$ Eigenfunction 133

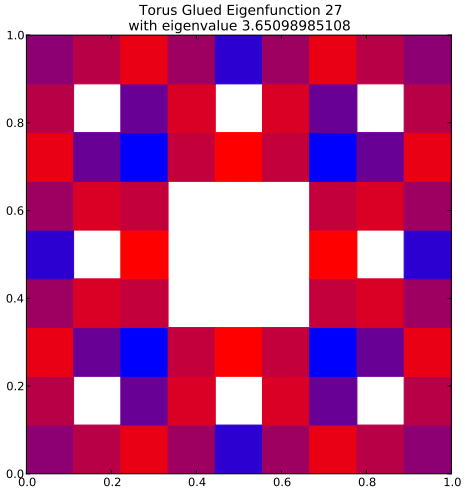
$M = 3$ Eigenfunction 133 has eigenvalue 2.48989525525





Compare to $m = 2$ eigenspace with eigenvalue 3.65098985108

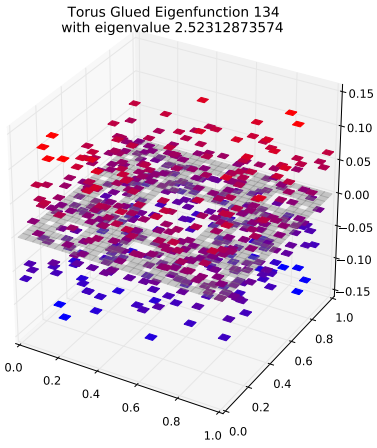


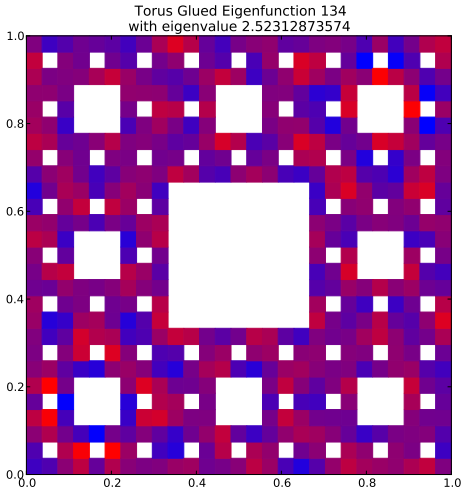


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.681978136565$
Dot Value: 0.38001585960907525

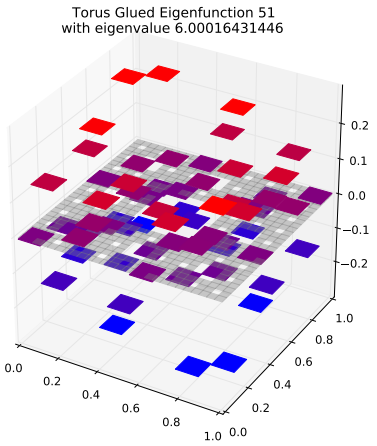
135 $M = 3$ Eigenfunction 134

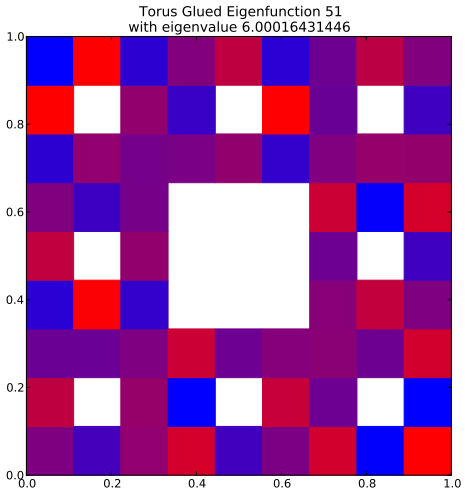
$M = 3$ Eigenfunction 134 has eigenvalue 2.52312873574





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

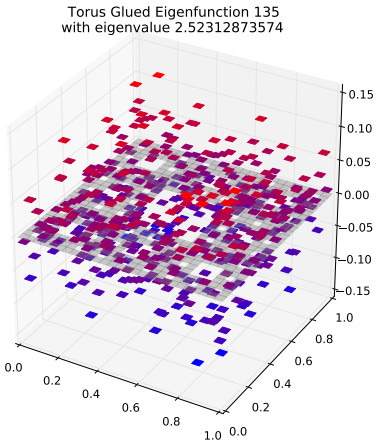


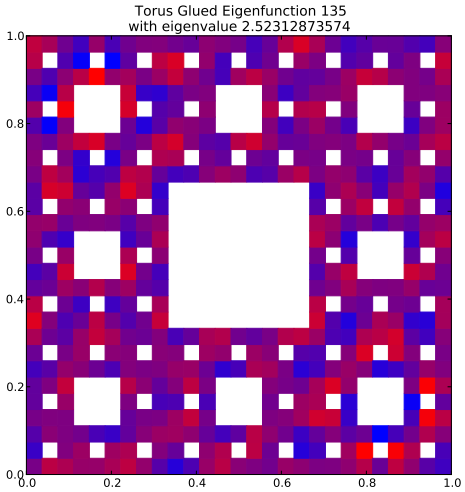


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.42050993998$
Dot Value: 0.5313859424037267

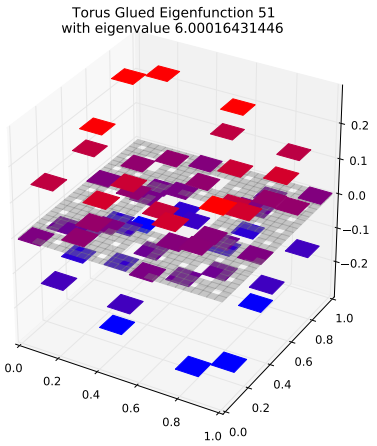
136 $M = 3$ Eigenfunction 135

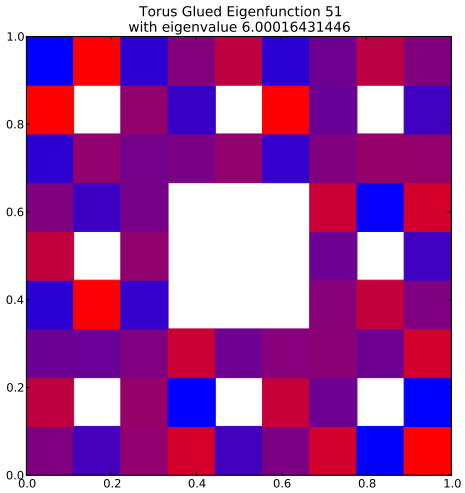
$M = 3$ Eigenfunction 135 has eigenvalue 2.52312873574





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)

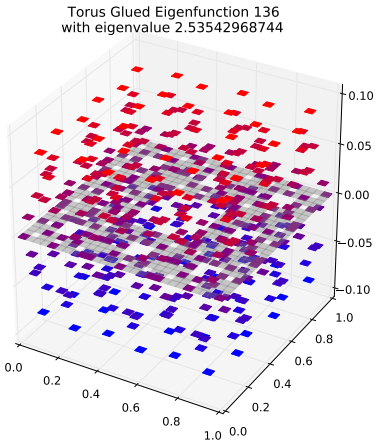


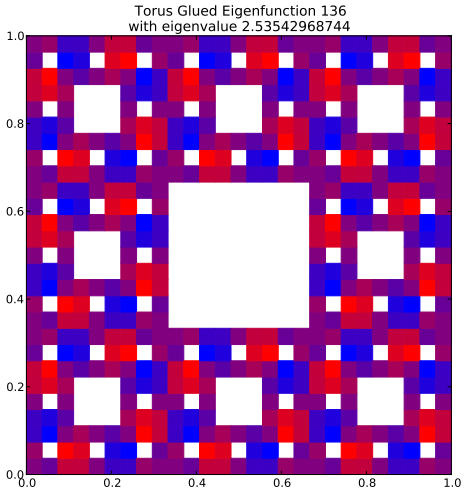


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.42050993998$
Dot Value: 0.5313859424037277

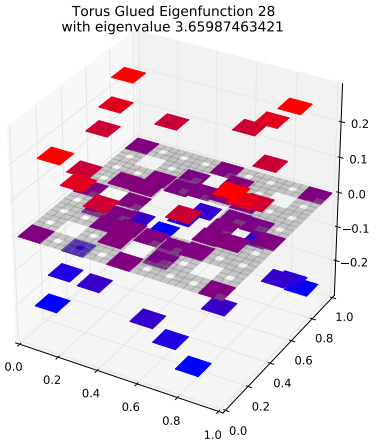
137 $M = 3$ Eigenfunction 136

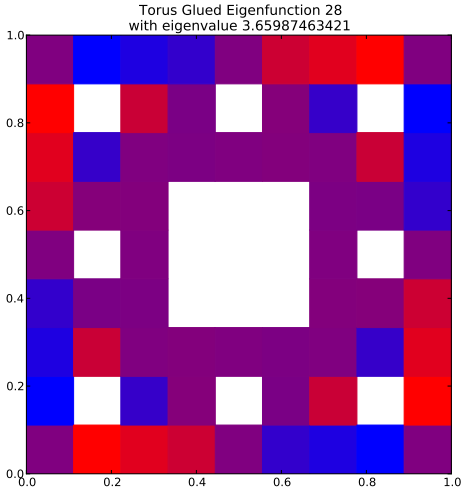
$M = 3$ Eigenfunction 136 has eigenvalue 2.53542968744





Compare to $m = 2$ eigenspace with eigenvalue 3.65987463421

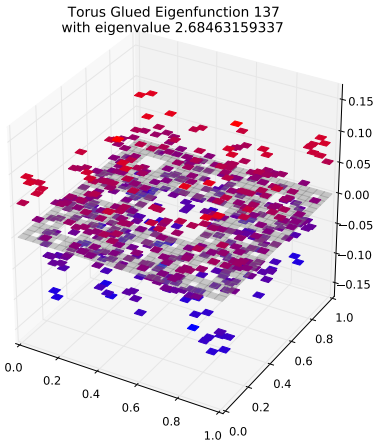


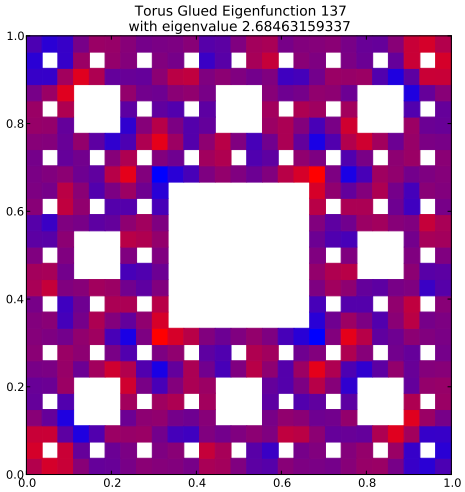


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.692764080971$
Dot Value: 2

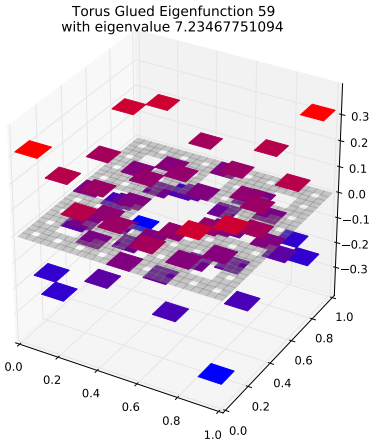
138 $M = 3$ Eigenfunction 137

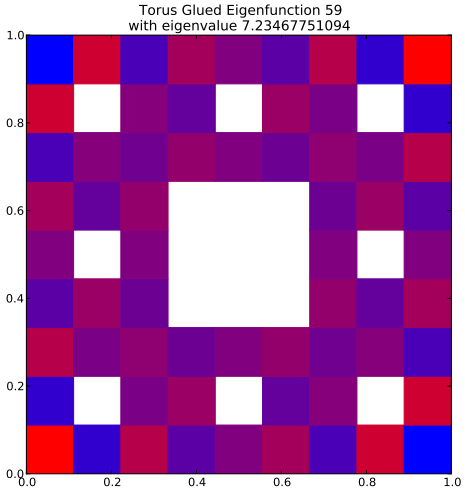
$M = 3$ Eigenfunction 137 has eigenvalue 2.68463159337





Compare to $m = 2$ eigenspace with eigenvalue 7.23467751094

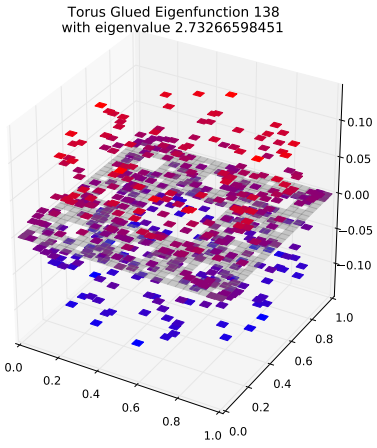


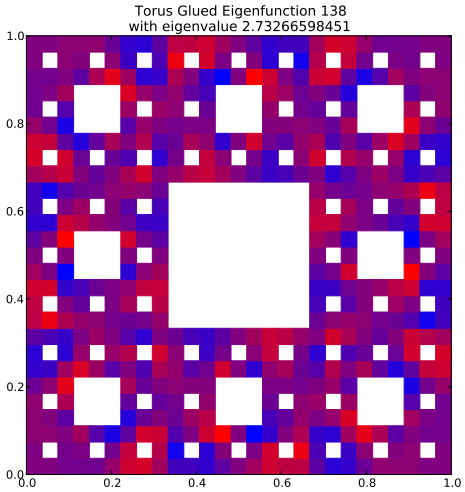


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.371078267042$
Dot Value: 0.24488389800479504

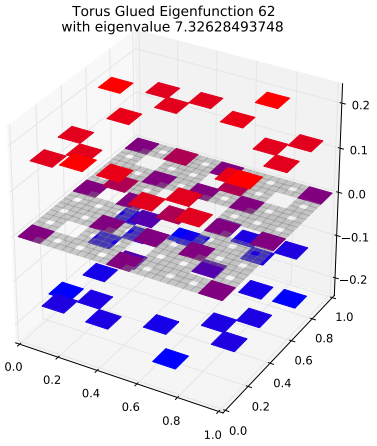
139 $M = 3$ Eigenfunction 138

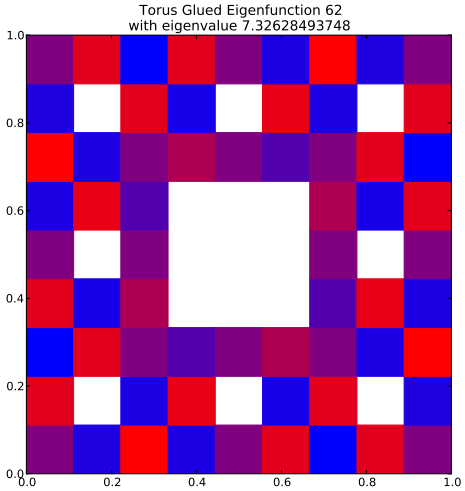
$M = 3$ Eigenfunction 138 has eigenvalue 2.73266598451





Compare to $m = 2$ eigenspace with eigenvalue 7.32628493748

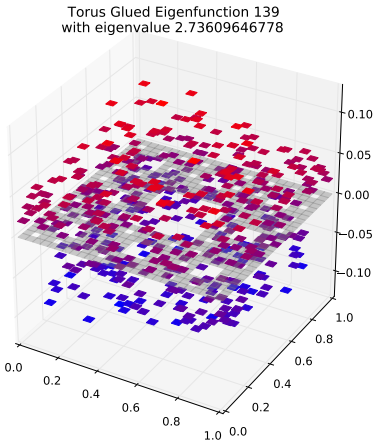


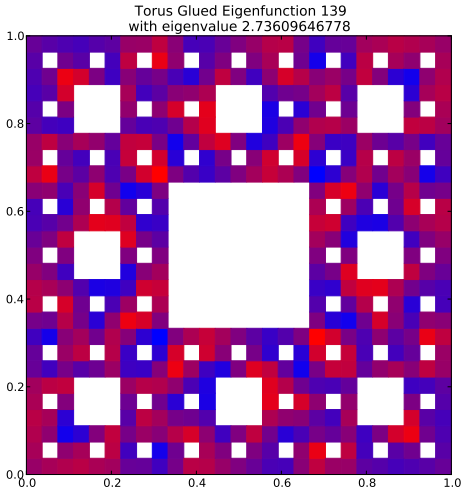


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.372994772634$
Dot Value: 0.11622944484108466

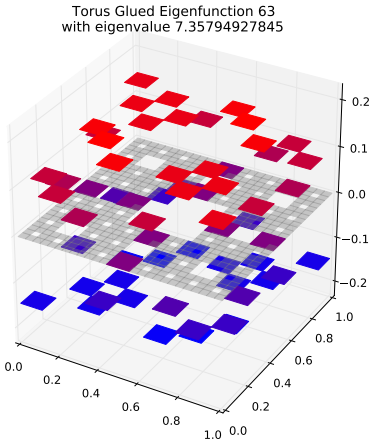
140 $M = 3$ Eigenfunction 139

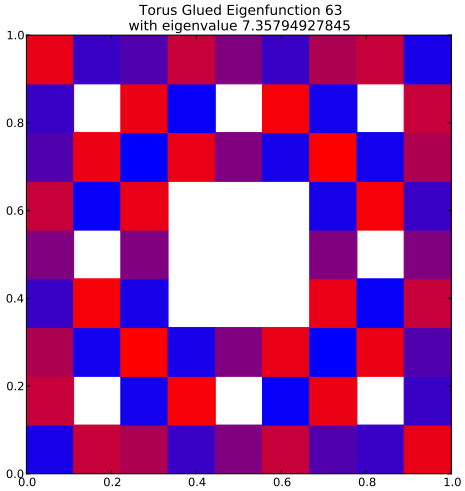
$M = 3$ Eigenfunction 139 has eigenvalue 2.73609646778





Compare to $m = 2$ eigenspace with eigenvalue 7.35794927845

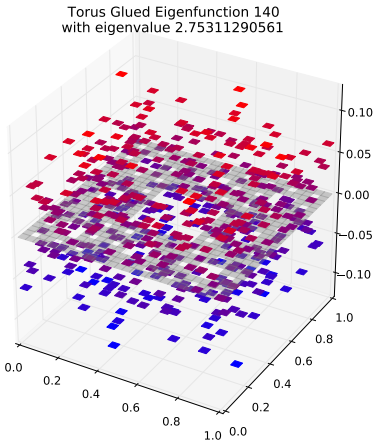


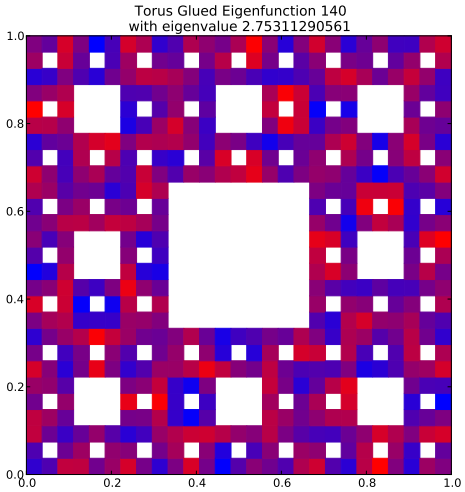


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.371855847905$
Dot Value: 0.21626405005701943

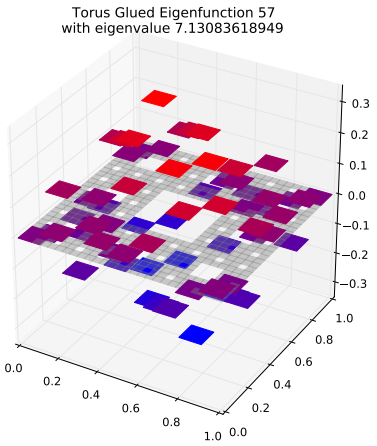
141 $M = 3$ Eigenfunction 140

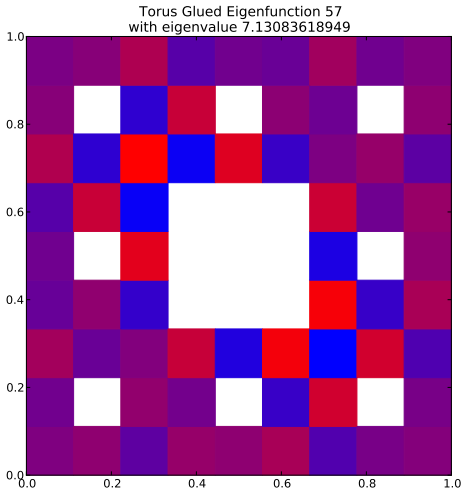
$M = 3$ Eigenfunction 140 has eigenvalue 2.75311290561





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

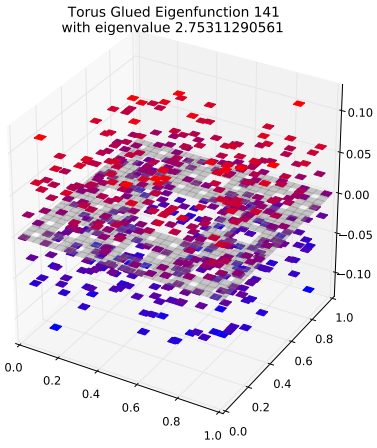


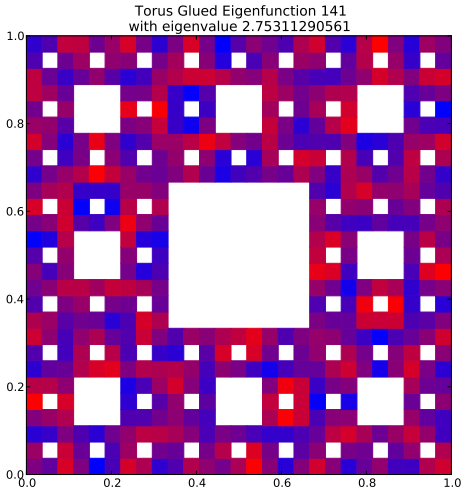


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.386085563103$
Dot Value: 0.2708091925551809

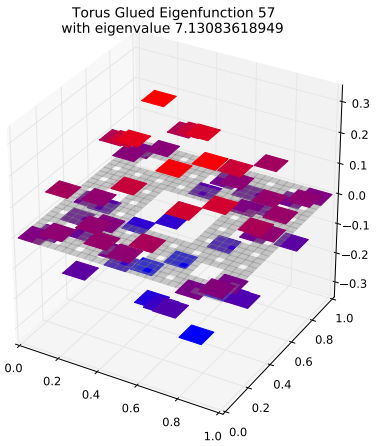
142 $M = 3$ Eigenfunction 141

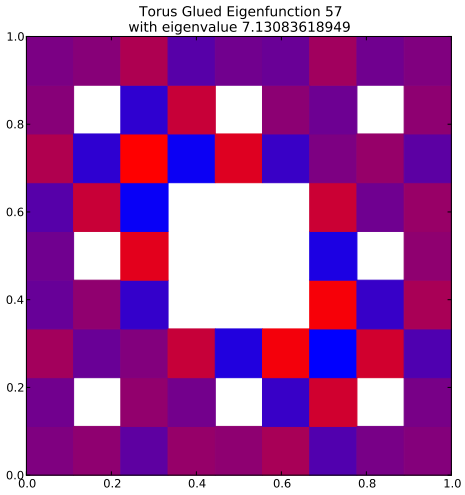
$M = 3$ Eigenfunction 141 has eigenvalue 2.75311290561





Compare to $m = 2$ eigenspace with eigenvalue 7.13083618949
(Note: Eigenspace Dimension > 1)

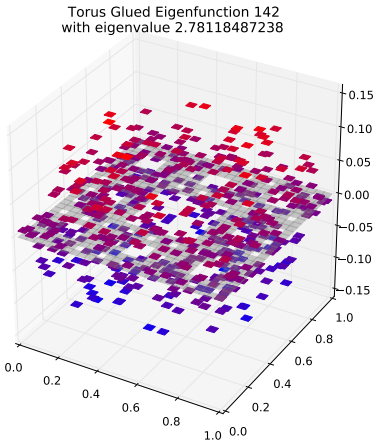


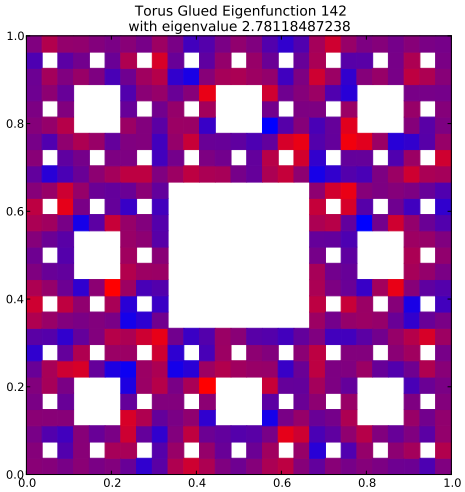


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.386085563103$
Dot Value: 0.2708091925551792

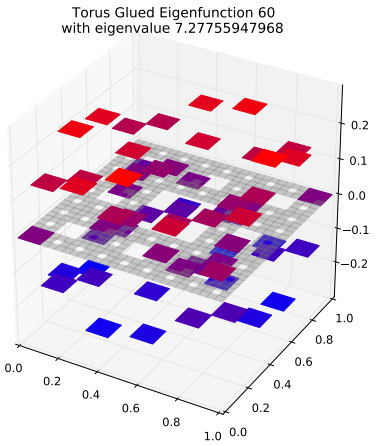
143 $M = 3$ Eigenfunction 142

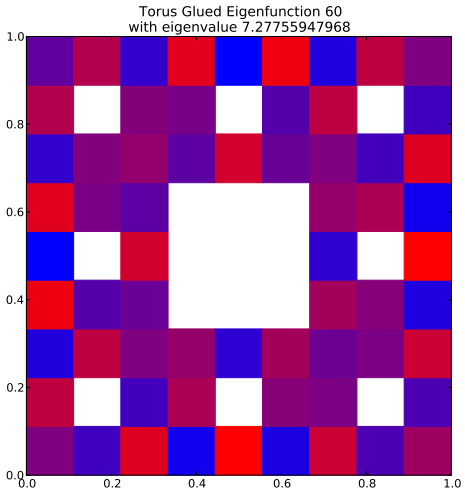
$M = 3$ Eigenfunction 142 has eigenvalue 2.78118487238





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

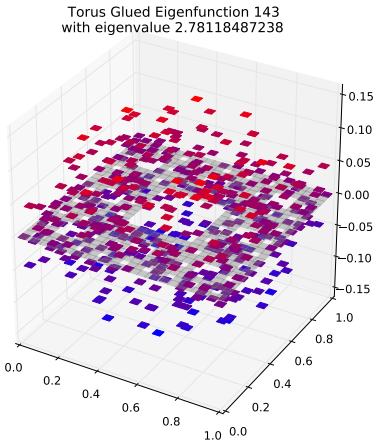


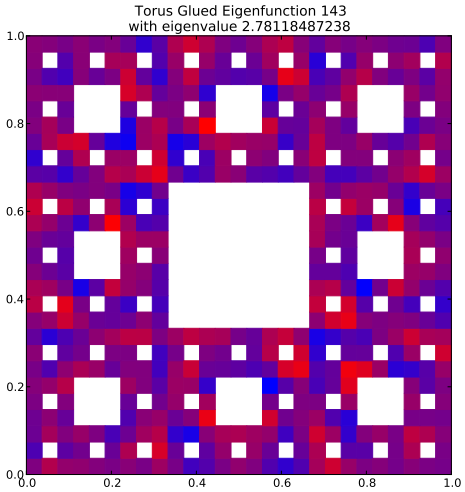


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.382159002636$
Dot Value: 0.21409640789049234

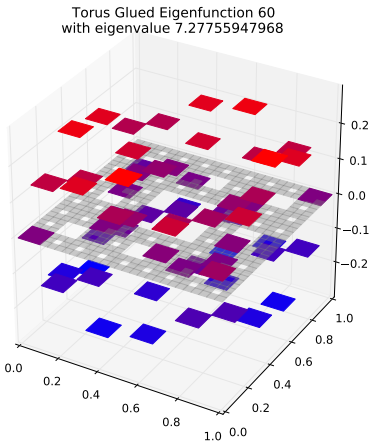
144 $M = 3$ Eigenfunction 143

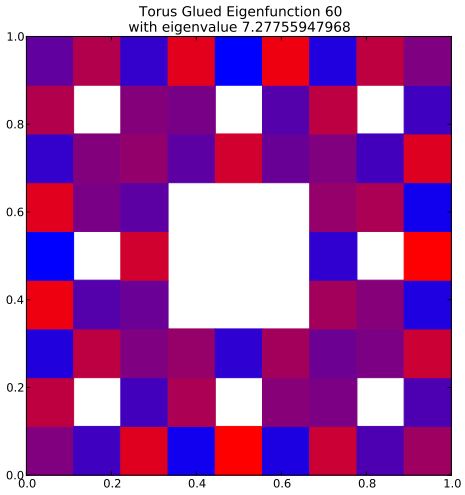
$M = 3$ Eigenfunction 143 has eigenvalue 2.78118487238





Compare to $m = 2$ eigenspace with eigenvalue 7.27755947968
(Note: Eigenspace Dimension > 1)

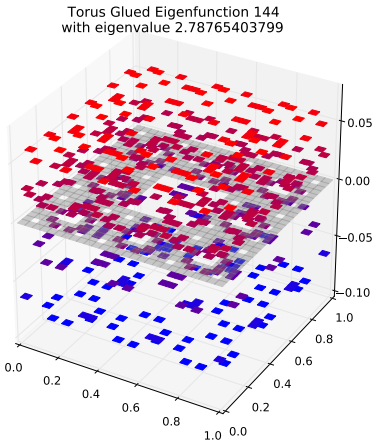


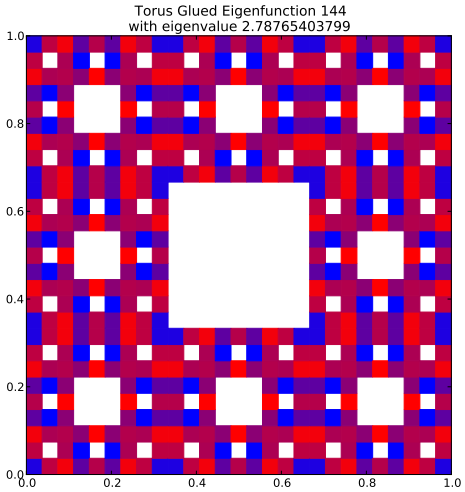


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.382159002636$
Dot Value: 0.21409640789049456

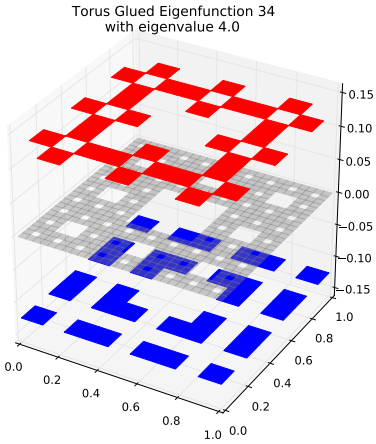
145 $M = 3$ Eigenfunction 144

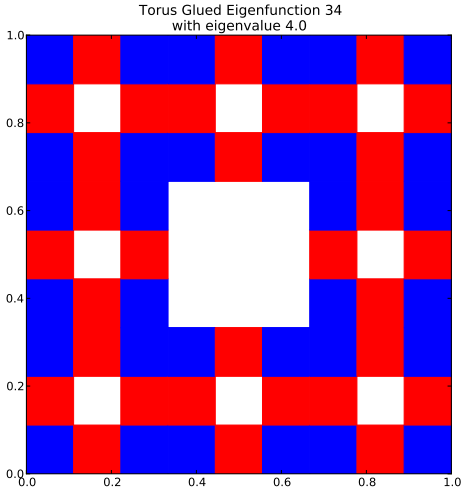
$M = 3$ Eigenfunction 144 has eigenvalue 2.78765403799





Compare to $m = 2$ eigenspace with eigenvalue 4.0

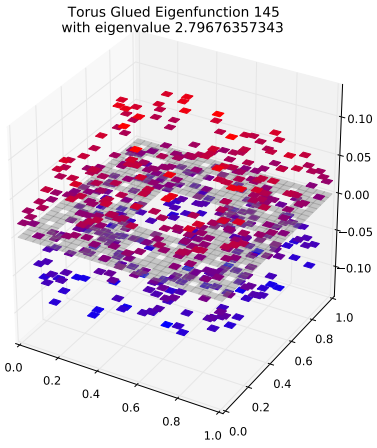


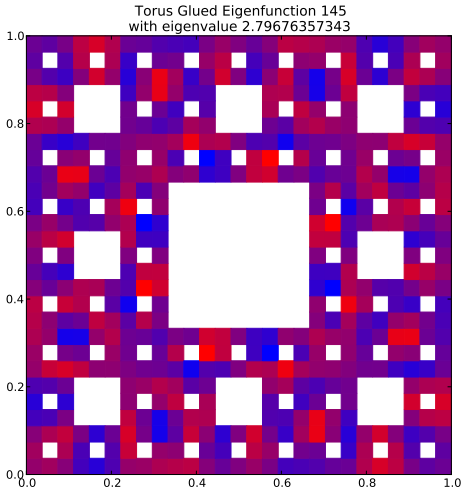


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.696913509497$
Dot Value: 0.0

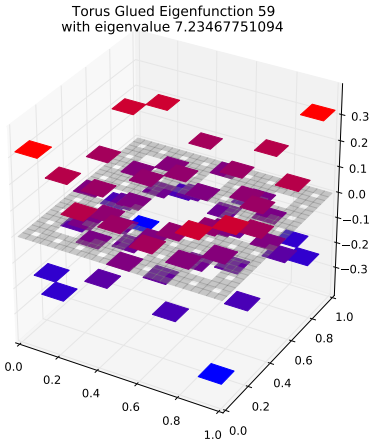
146 $M = 3$ Eigenfunction 145

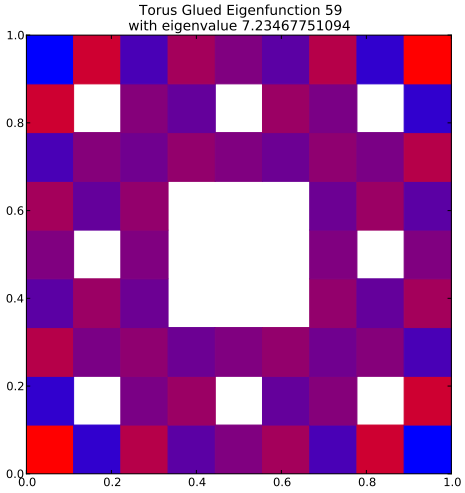
$M = 3$ Eigenfunction 145 has eigenvalue 2.79676357343





Compare to $m = 2$ eigenspace with eigenvalue 7.23467751094

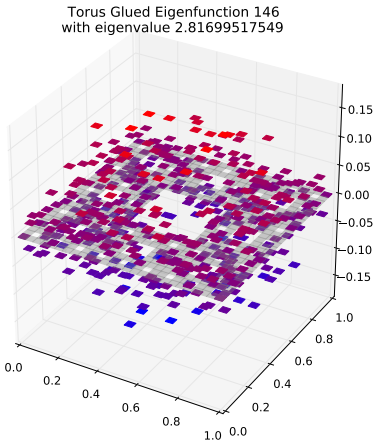


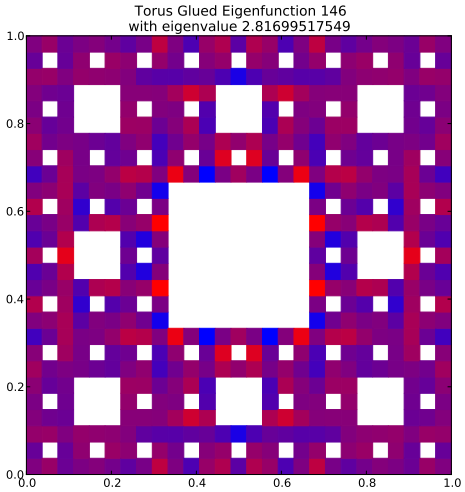


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.386577503862$
Dot Value: 0.30647292528006087

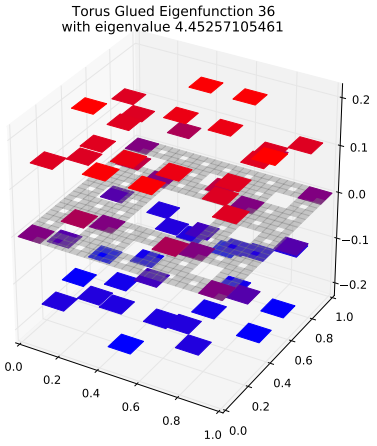
147 $M = 3$ Eigenfunction 146

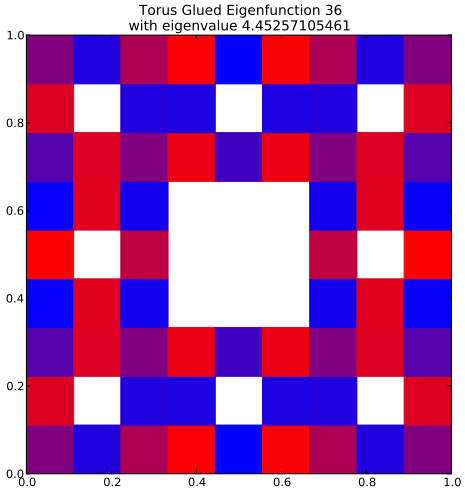
$M = 3$ Eigenfunction 146 has eigenvalue 2.81699517549





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

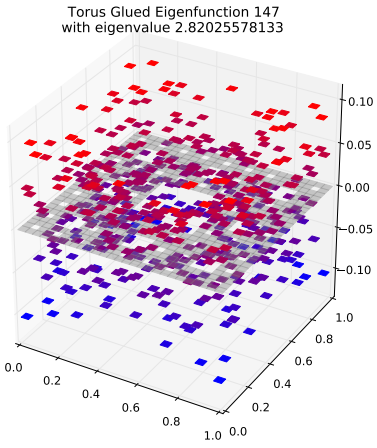


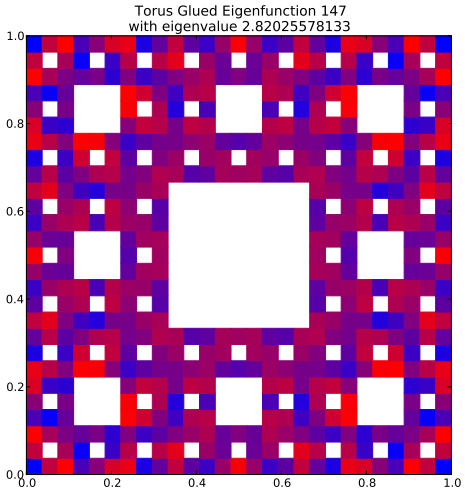


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.632667090754$
Dot Value: 0.39842477065624005

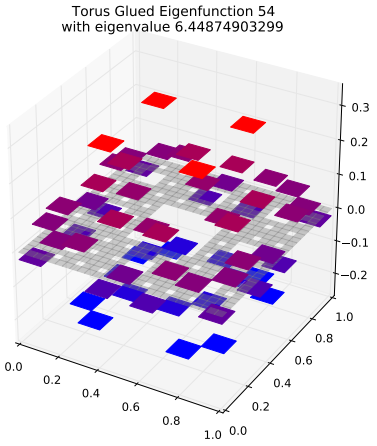
148 $M = 3$ Eigenfunction 147

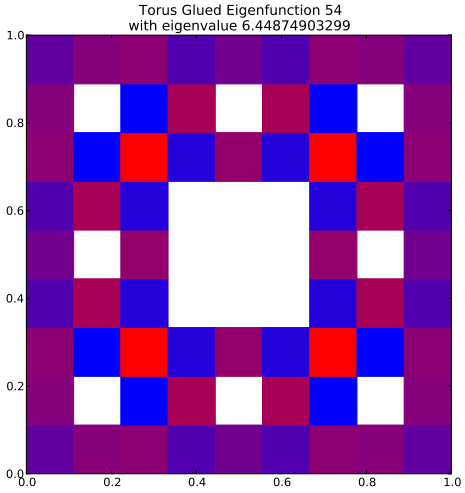
$M = 3$ Eigenfunction 147 has eigenvalue 2.82025578133





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

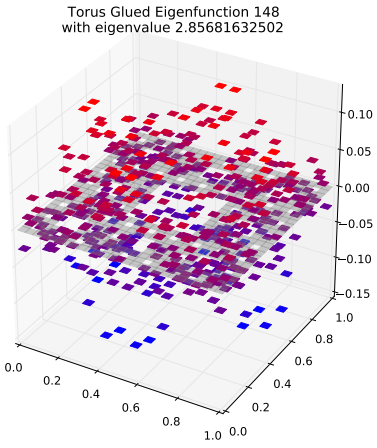


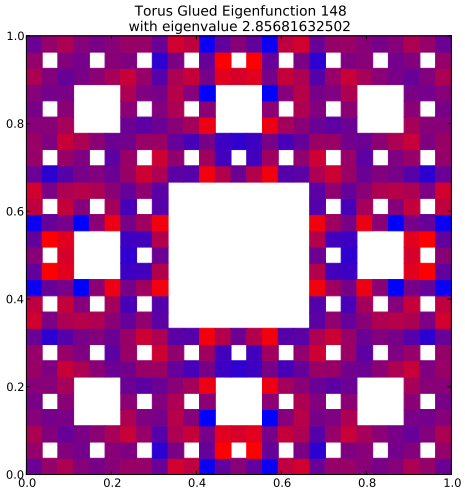


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.43733377852$
Dot Value: 0.31464588415287476

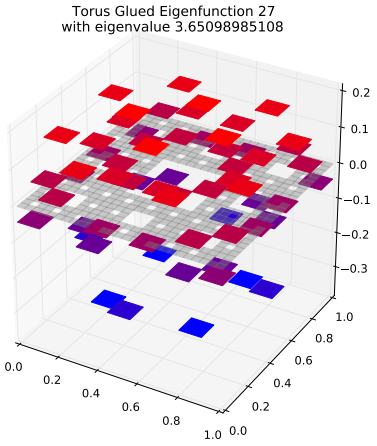
149 $M = 3$ Eigenfunction 148

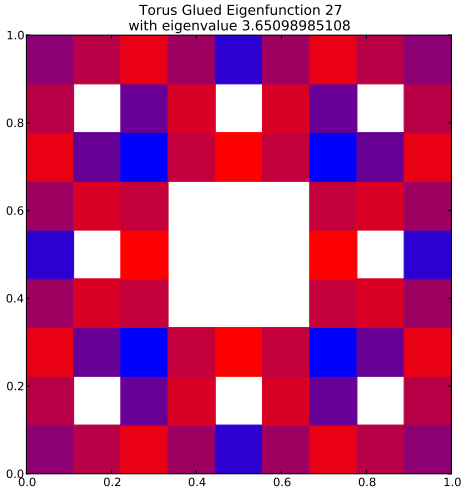
$M = 3$ Eigenfunction 148 has eigenvalue 2.85681632502





Compare to $m = 2$ eigenspace with eigenvalue 3.65098985108

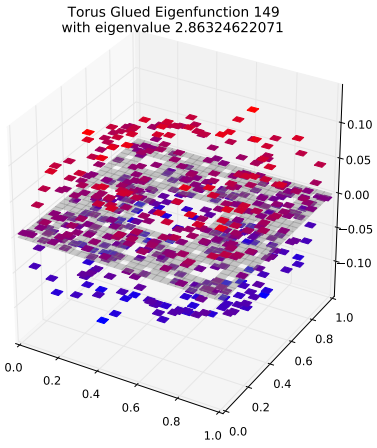


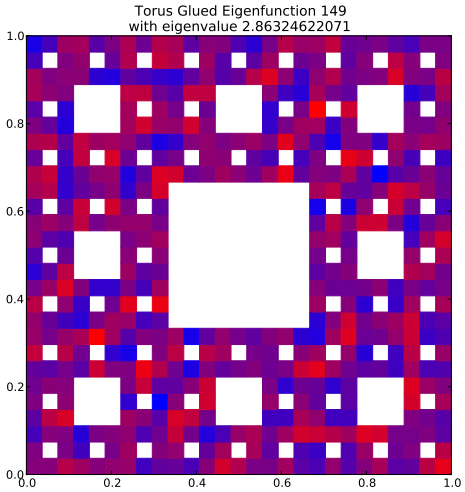


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.782477202498$
Dot Value: 0.3361795684172051

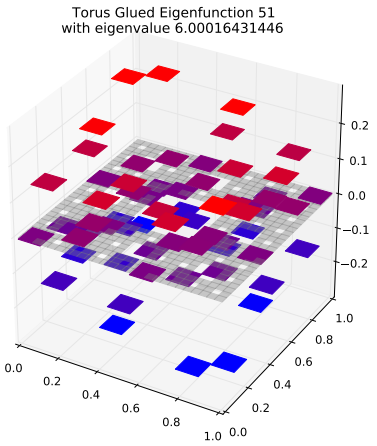
150 $M = 3$ Eigenfunction 149

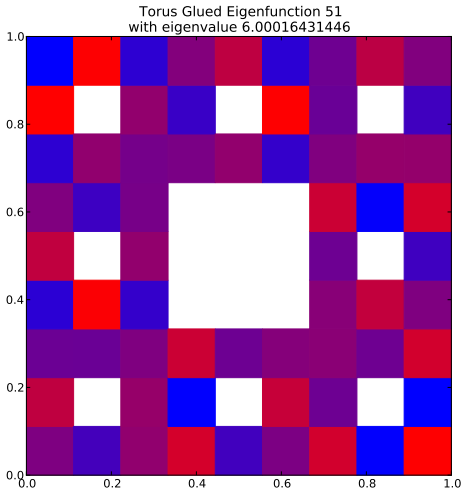
$M = 3$ Eigenfunction 149 has eigenvalue 2.86324622071





Compare to $m = 2$ eigenspace with eigenvalue 6.00016431446
(Note: Eigenspace Dimension > 1)





Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.477194635121$
Dot Value: 0.48056072387882043