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

SPUR 2016

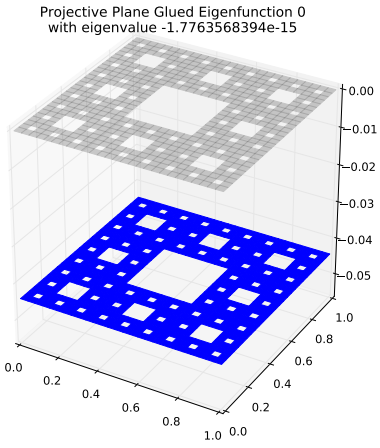
May 23, 2018

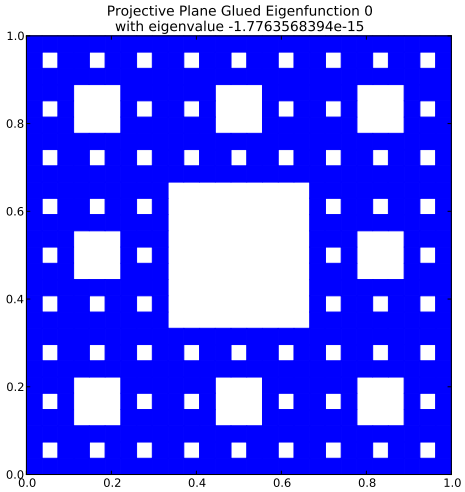
Key to Dot Value

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.

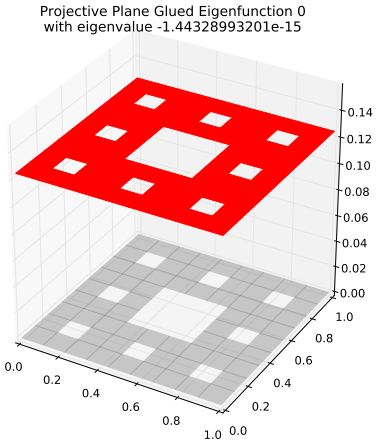
1 $M = 3$ Eigenfunction 0

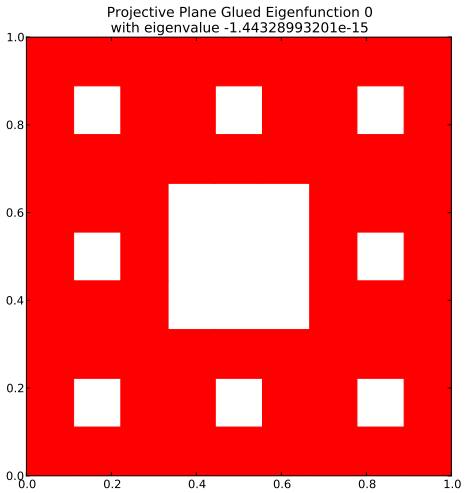
$M = 3$ Eigenfunction 0 has eigenvalue -1.7763568394e-15





Compare to $m = 2$ eigenspace with eigenvalue -1.16573417586e-15

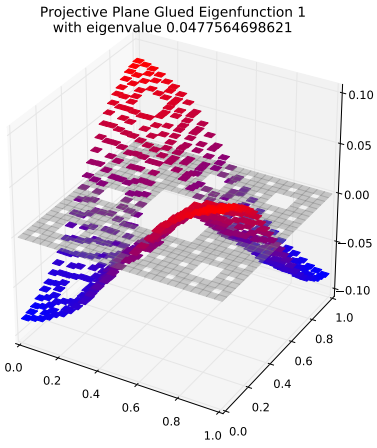


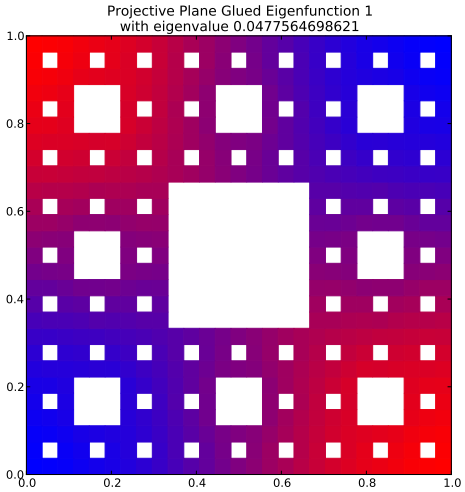


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.52380952381$
Dot Value: 0.0

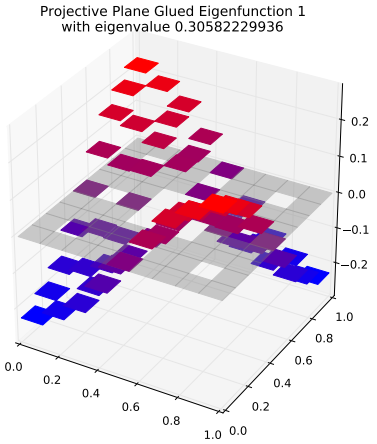
2 $M = 3$ Eigenfunction 1

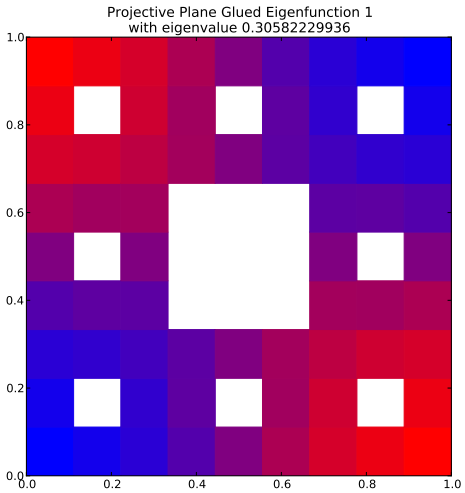
$M = 3$ Eigenfunction 1 has eigenvalue 0.0477564698621





Compare to $m = 2$ eigenspace with eigenvalue 0.30582229936

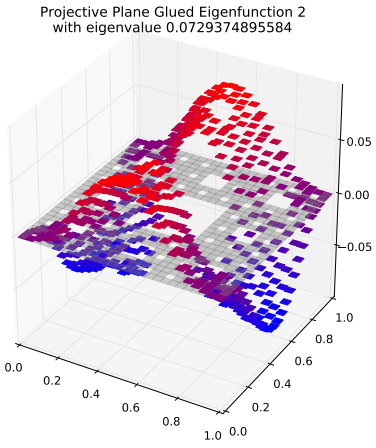


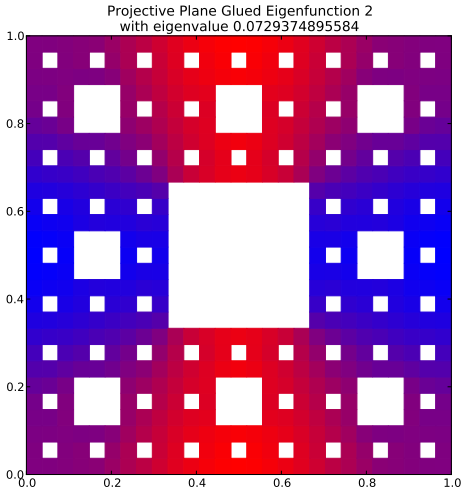


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.156157578967$
Dot Value: 0.00017225677959220587

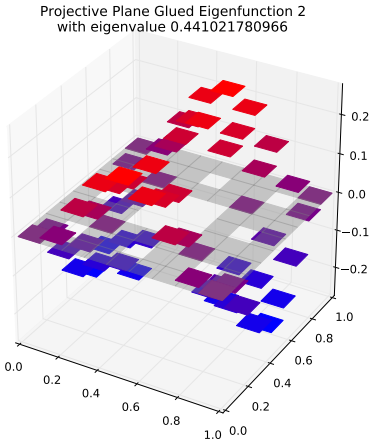
3 $M = 3$ Eigenfunction 2

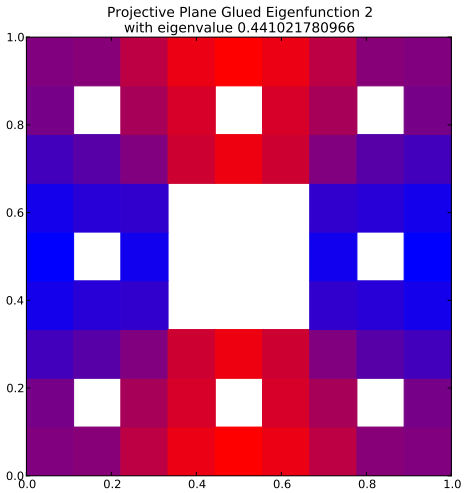
$M = 3$ Eigenfunction 2 has eigenvalue 0.0729374895584





Compare to $m = 2$ eigenspace with eigenvalue 0.441021780966

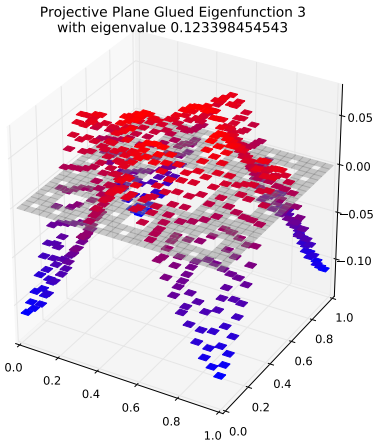


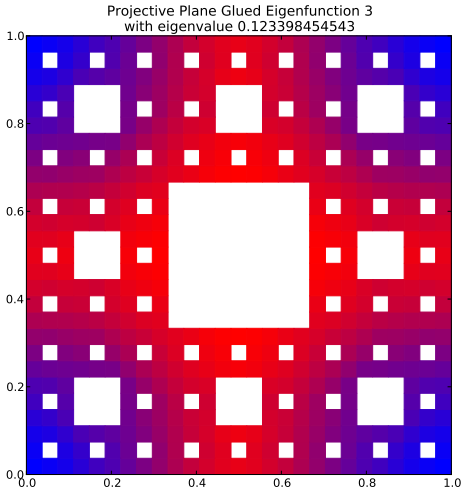


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.16538296453$
Dot Value: 0.00019085106911675975

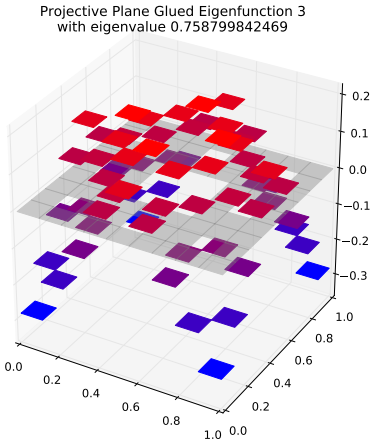
4 $M = 3$ Eigenfunction 3

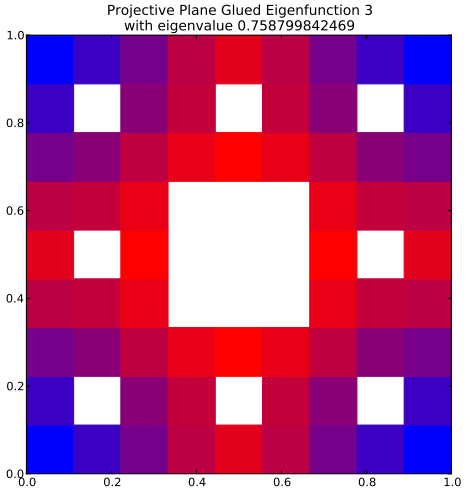
$M = 3$ Eigenfunction 3 has eigenvalue 0.123398454543





Compare to $m = 2$ eigenspace with eigenvalue 0.758799842469

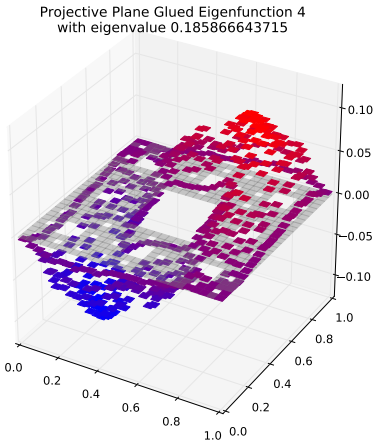


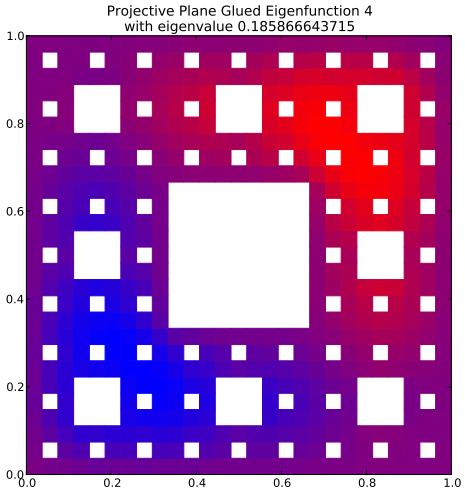


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.16262319473$
Dot Value: 0.0014215263537862288

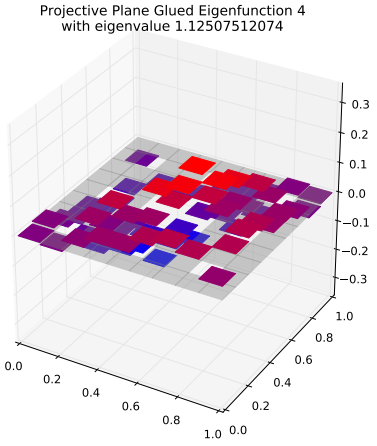
5 $M = 3$ Eigenfunction 4

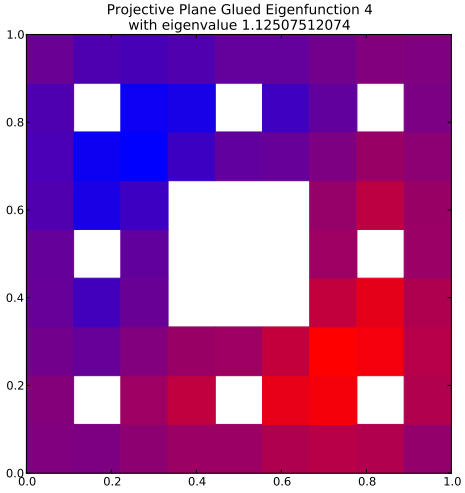
$M = 3$ Eigenfunction 4 has eigenvalue 0.185866643715





Compare to $m = 2$ eigenspace with eigenvalue 1.12507512074
(Note: Eigenspace Dimension > 1)

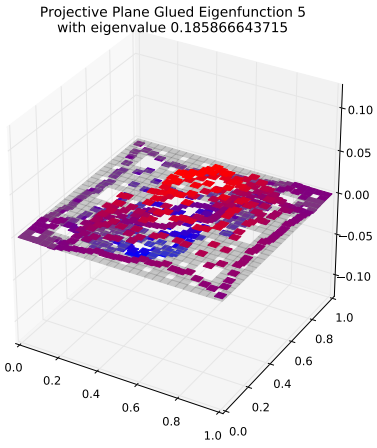


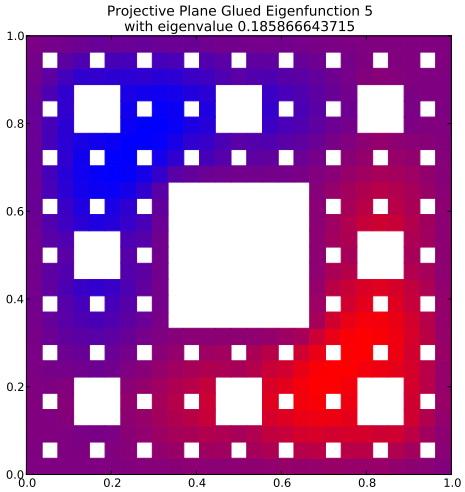


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.165203763099$
Dot Value: 0.0014332152551934652

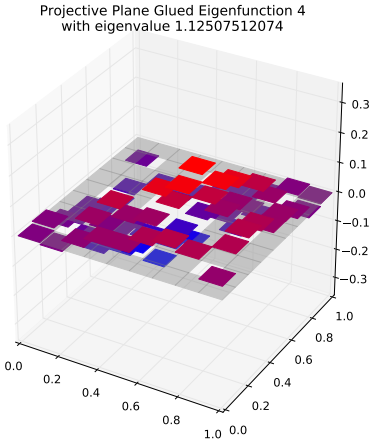
6 $M = 3$ Eigenfunction 5

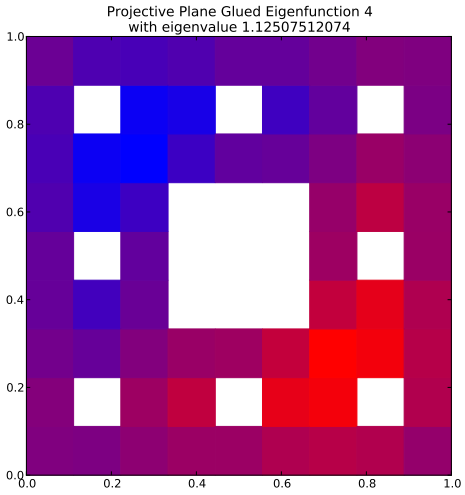
$M = 3$ Eigenfunction 5 has eigenvalue 0.185866643715





Compare to $m = 2$ eigenspace with eigenvalue 1.12507512074
(Note: Eigenspace Dimension > 1)

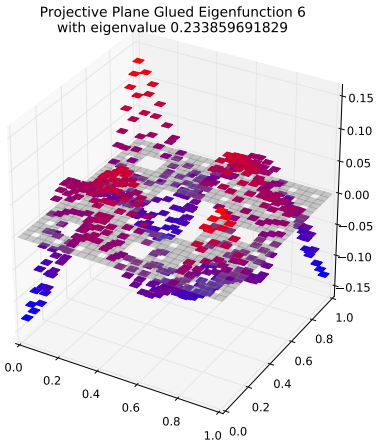


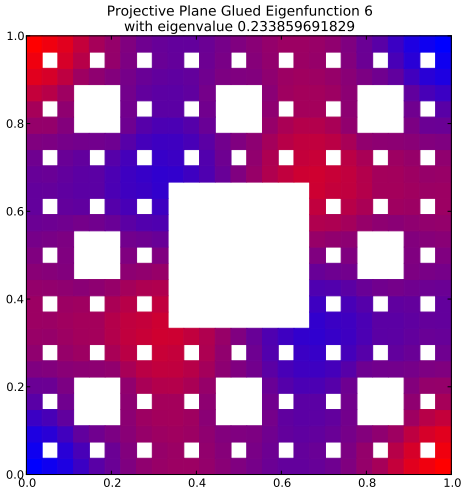


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.165203763099$
Dot Value: 0.0014332152551935762

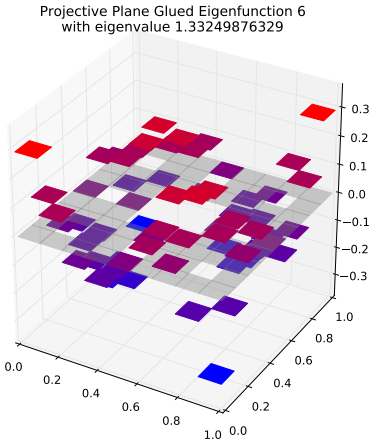
7 $M = 3$ Eigenfunction 6

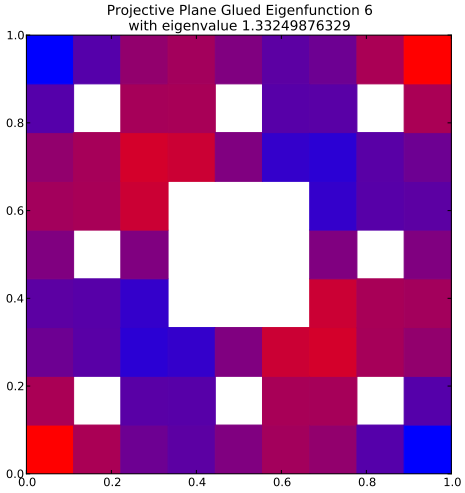
$M = 3$ Eigenfunction 6 has eigenvalue 0.233859691829





Compare to $m = 2$ eigenspace with eigenvalue 1.33249876329

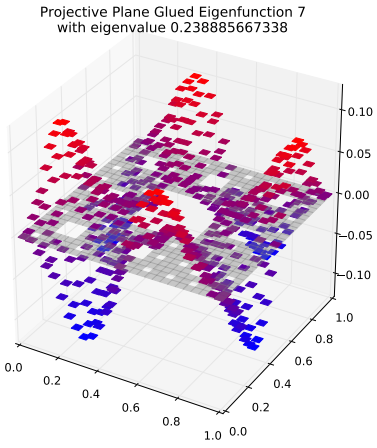


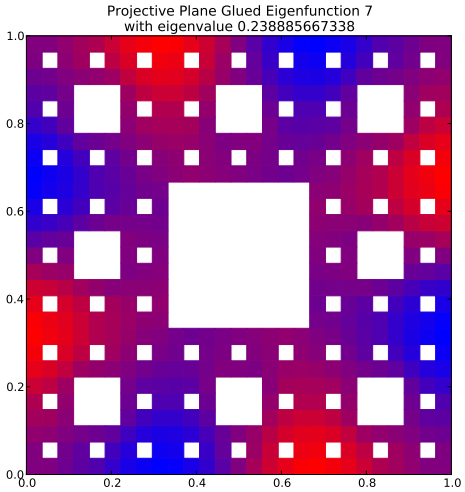


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.175504622047$
Dot Value: 0.0003283457785615562

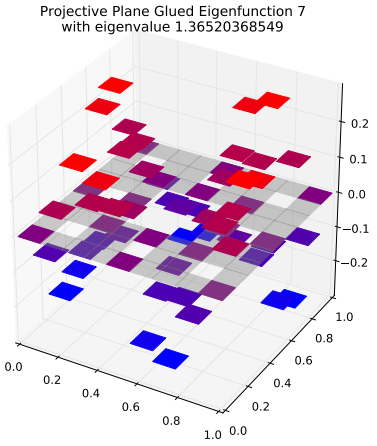
8 $M = 3$ Eigenfunction 7

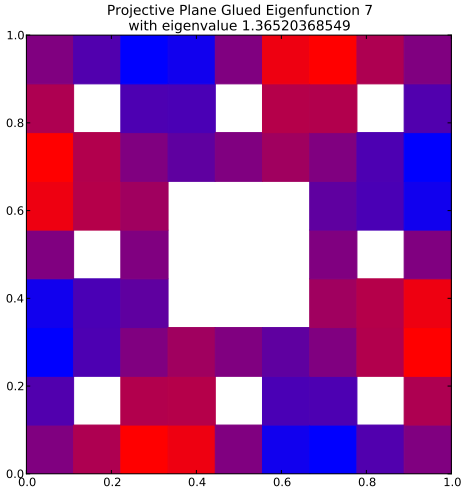
$M = 3$ Eigenfunction 7 has eigenvalue 0.238885667338





Compare to $m = 2$ eigenspace with eigenvalue 1.36520368549

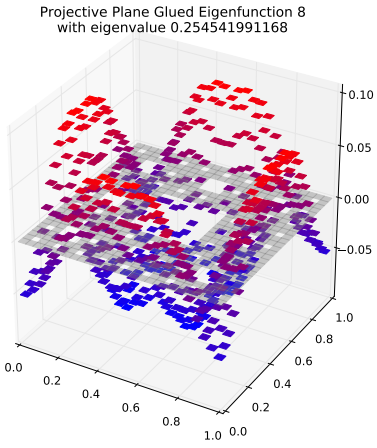


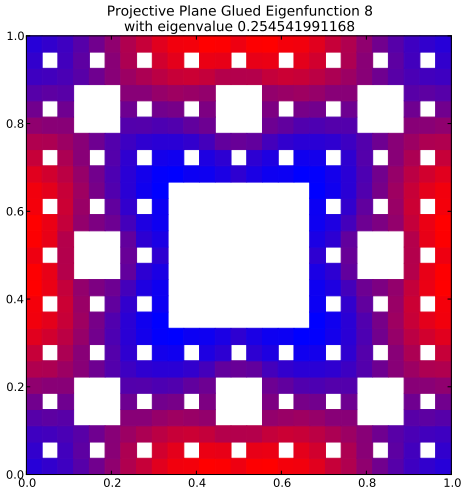


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.174981704106$
Dot Value: 0.0024135566193831393

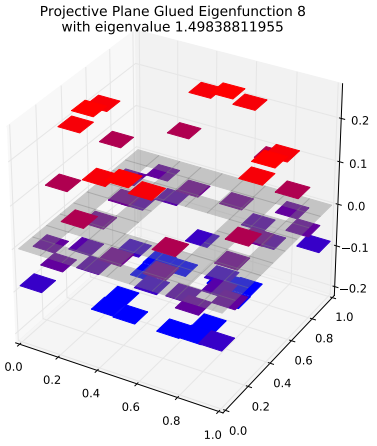
9 $M = 3$ Eigenfunction 8

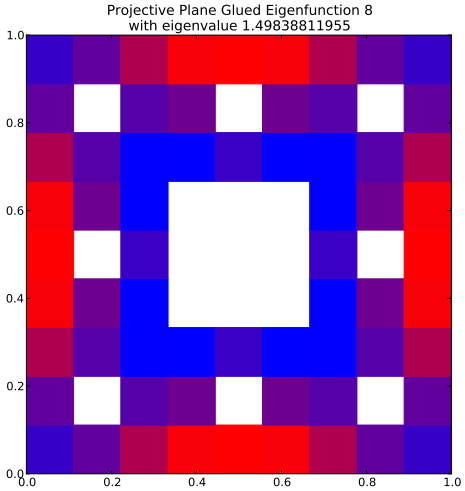
$M = 3$ Eigenfunction 8 has eigenvalue 0.254541991168





Compare to $m = 2$ eigenspace with eigenvalue 1.49838811955

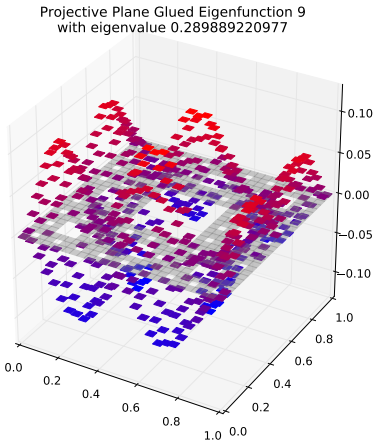


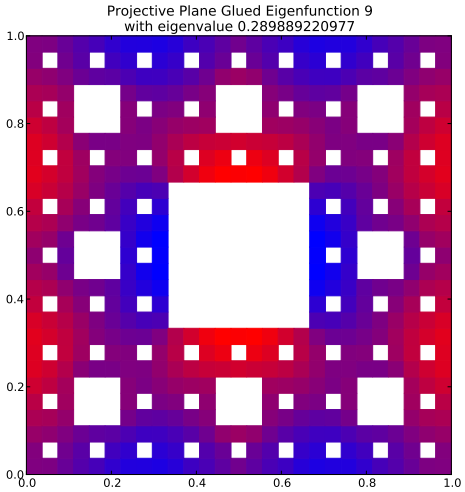


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.169877208613$
Dot Value: 0.011862172098631052

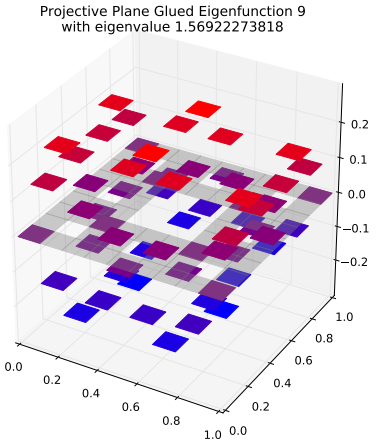
10 $M = 3$ Eigenfunction 9

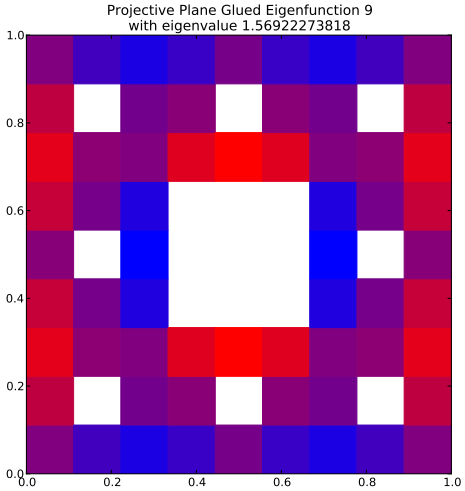
$M = 3$ Eigenfunction 9 has eigenvalue 0.289889220977





Compare to $m = 2$ eigenspace with eigenvalue 1.56922273818

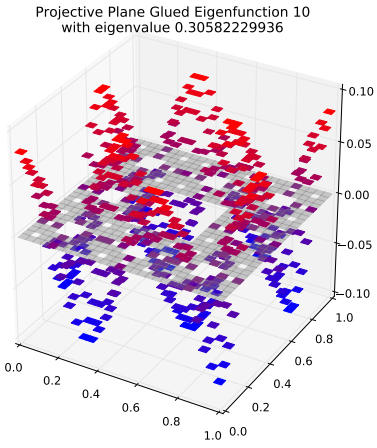


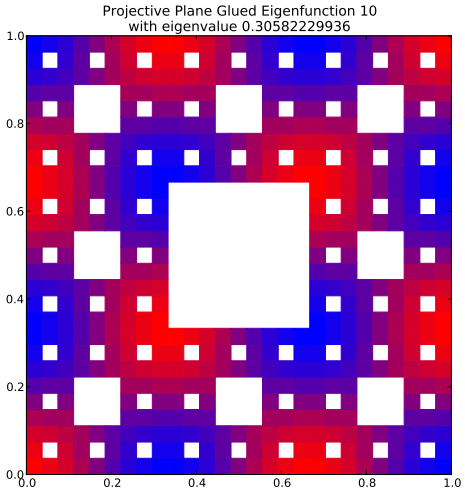


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.184734272531$
Dot Value: 0.0006826703997200312

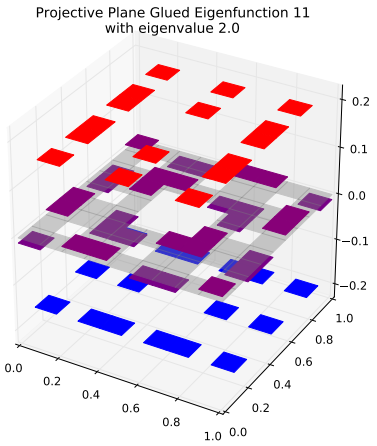
11 $M = 3$ Eigenfunction 10

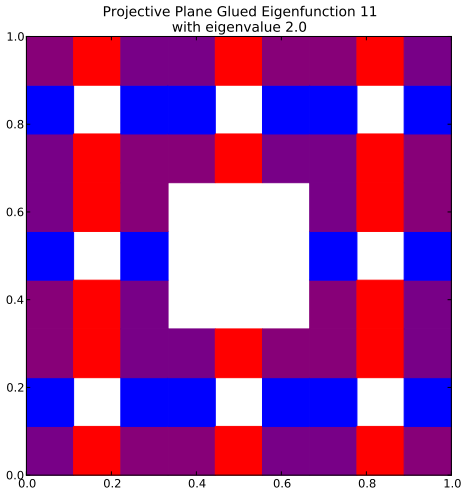
$M = 3$ Eigenfunction 10 has eigenvalue 0.30582229936





Compare to $m = 2$ eigenspace with eigenvalue 2.0
(Note: Eigenspace Dimension > 1)

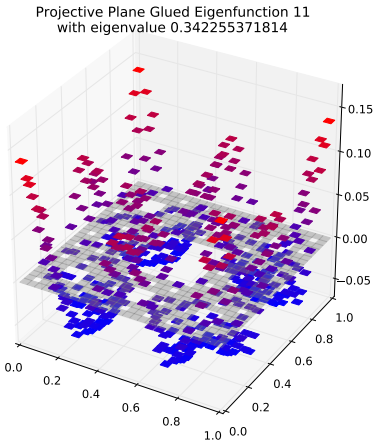


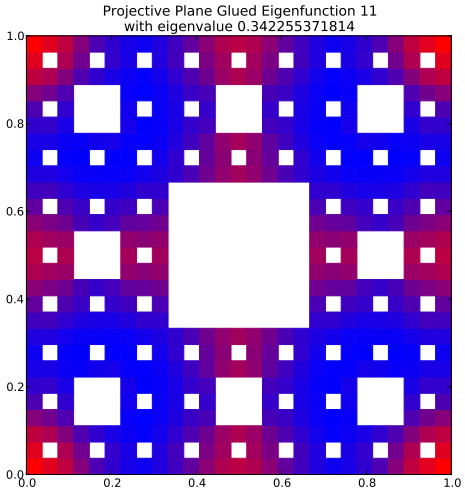


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.15291114968$
Dot Value: 1.1102230246251565e-16

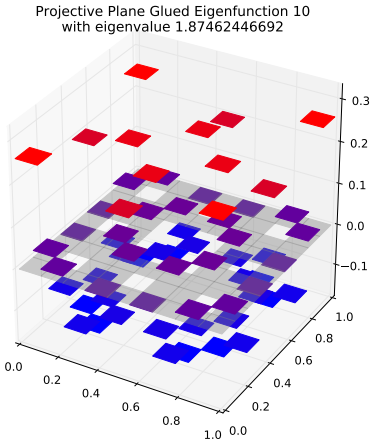
12 $M = 3$ Eigenfunction 11

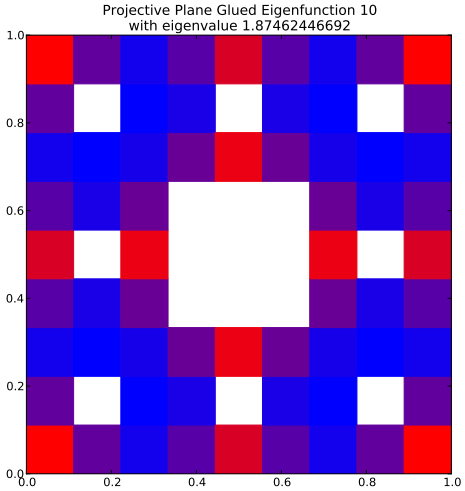
$M = 3$ Eigenfunction 11 has eigenvalue 0.342255371814





Compare to $m = 2$ eigenspace with eigenvalue 1.87462446692

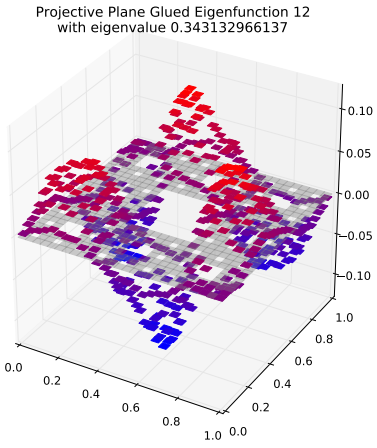


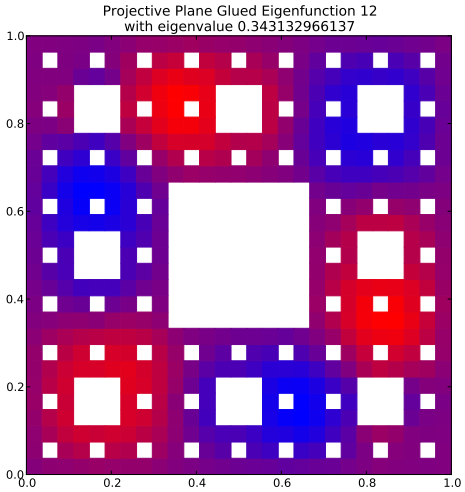


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.182572764761$
Dot Value: 0.029416001032016248

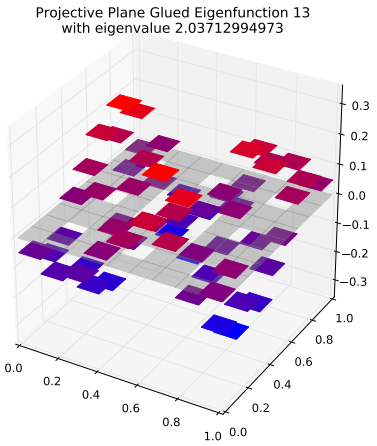
13 $M = 3$ Eigenfunction 12

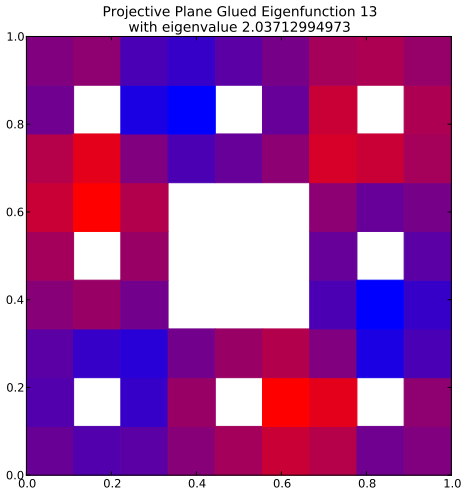
$M = 3$ Eigenfunction 12 has eigenvalue 0.343132966137





Compare to $m = 2$ eigenspace with eigenvalue 2.03712994973
(Note: Eigenspace Dimension > 1)

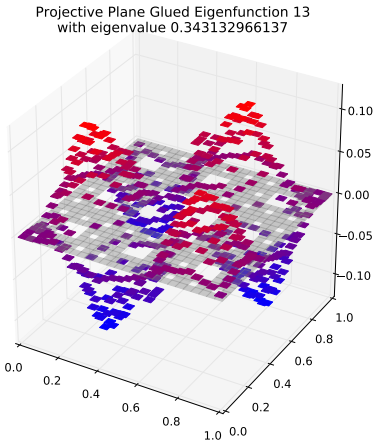


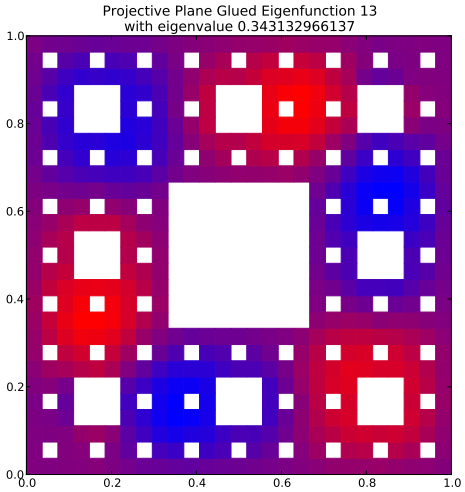


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.168439409662$
Dot Value: 0.010935030837211812

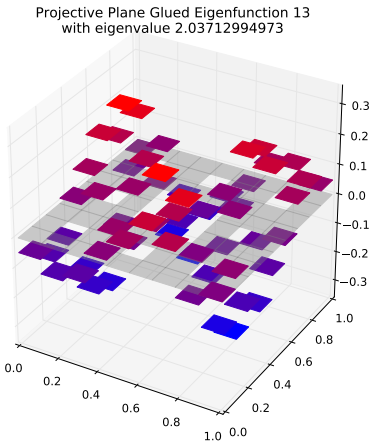
14 $M = 3$ Eigenfunction 13

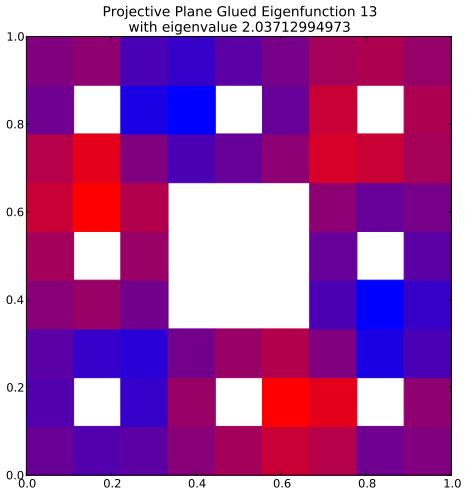
$M = 3$ Eigenfunction 13 has eigenvalue 0.343132966137





Compare to $m = 2$ eigenspace with eigenvalue 2.03712994973
(Note: Eigenspace Dimension > 1)

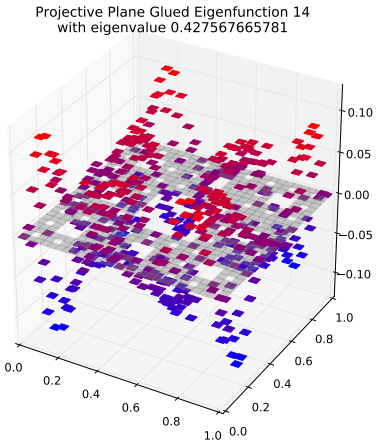


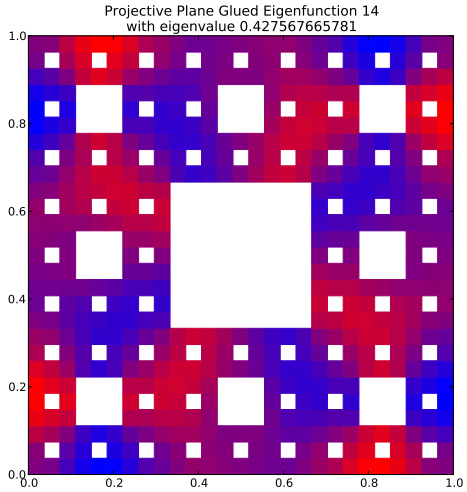


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.168439409662$
Dot Value: 0.01093503083721159

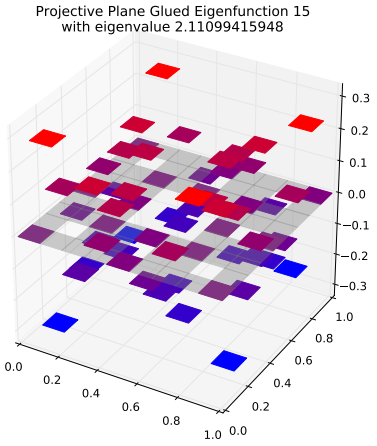
15 $M = 3$ Eigenfunction 14

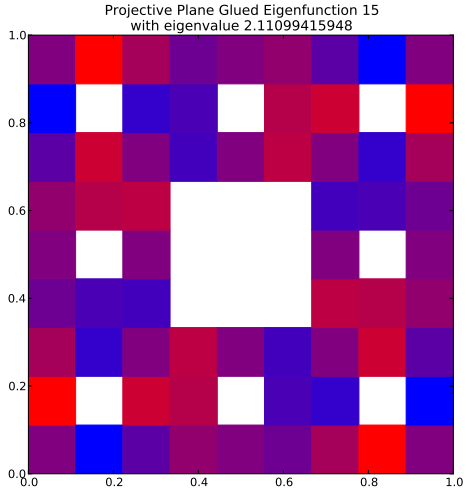
$M = 3$ Eigenfunction 14 has eigenvalue 0.427567665781





Compare to $m = 2$ eigenspace with eigenvalue 2.11099415948

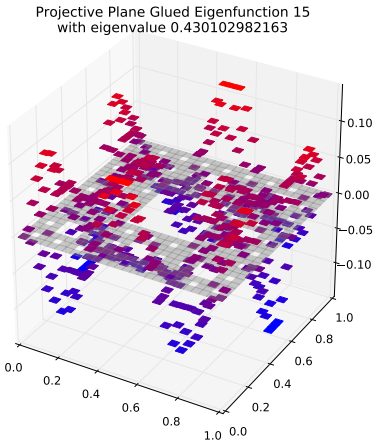


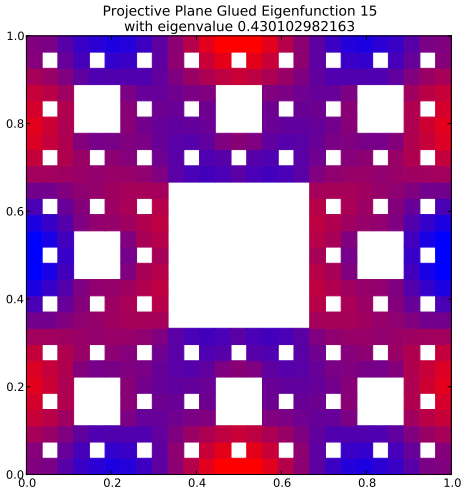


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.202543272733$
Dot Value: 0.007310975902898864

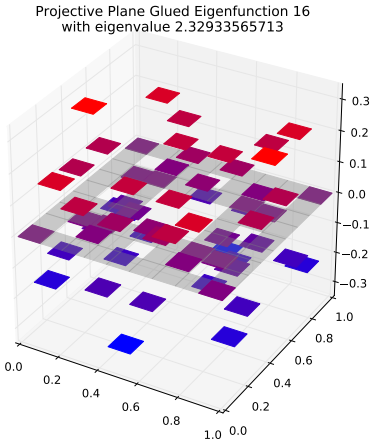
16 $M = 3$ Eigenfunction 15

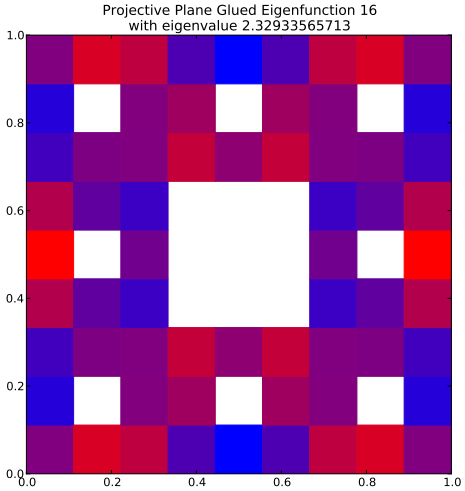
$M = 3$ Eigenfunction 15 has eigenvalue 0.430102982163





Compare to $m = 2$ eigenspace with eigenvalue 2.32933565713

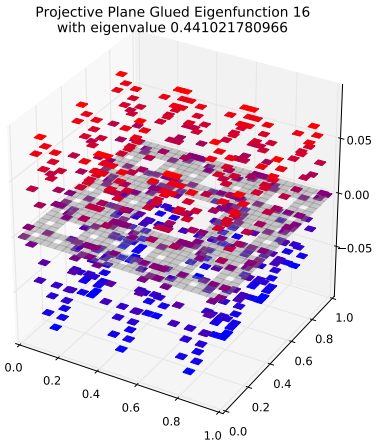


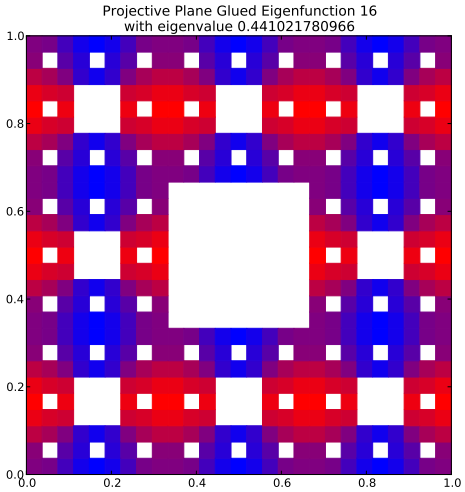


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.184646201953$
Dot Value: 0.0114455486965932

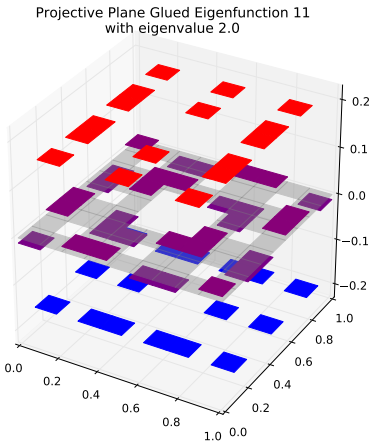
17 $M = 3$ Eigenfunction 16

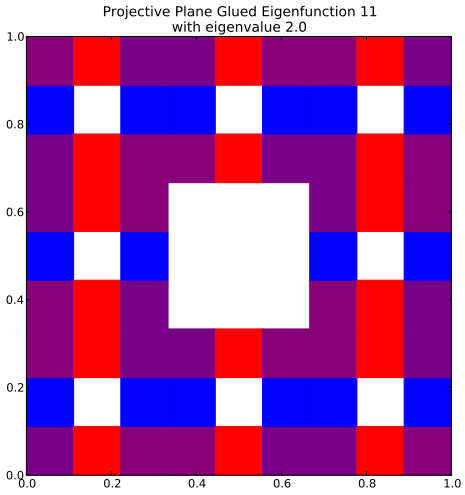
$M = 3$ Eigenfunction 16 has eigenvalue 0.441021780966





Compare to $m = 2$ eigenspace with eigenvalue 2.0
(Note: Eigenspace Dimension > 1)

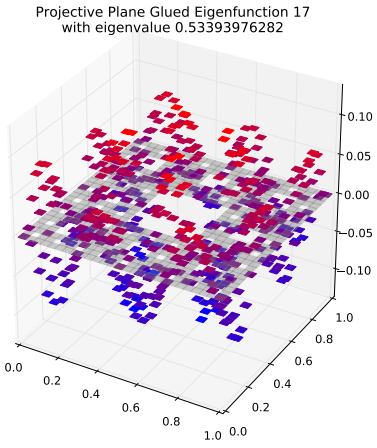


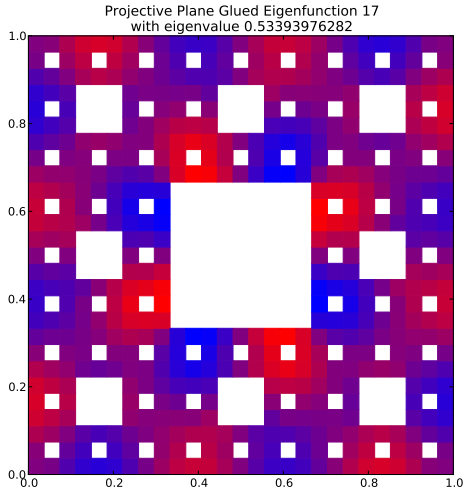


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.220510890483$
Dot Value: 0.0

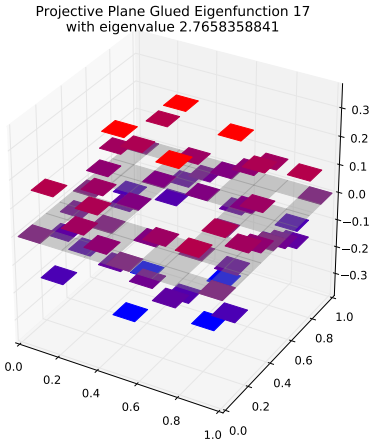
18 $M = 3$ Eigenfunction 17

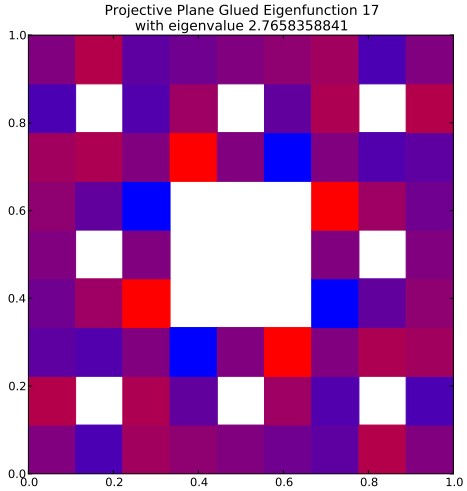
$M = 3$ Eigenfunction 17 has eigenvalue 0.53393976282





Compare to $m = 2$ eigenspace with eigenvalue 2.7658358841

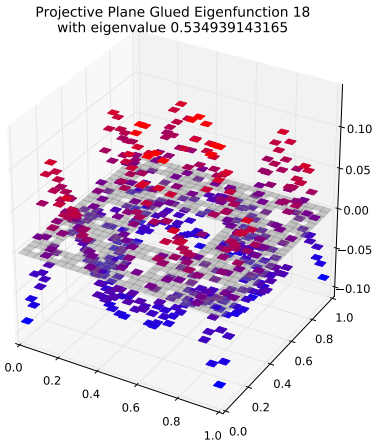


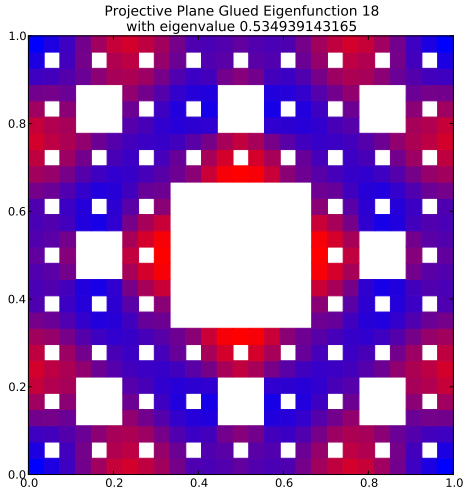


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.193048244797$
Dot Value: 0.13241666911770067

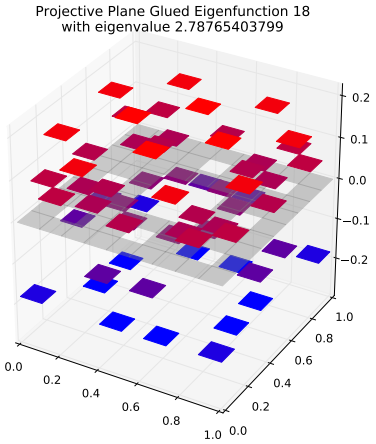
19 $M = 3$ Eigenfunction 18

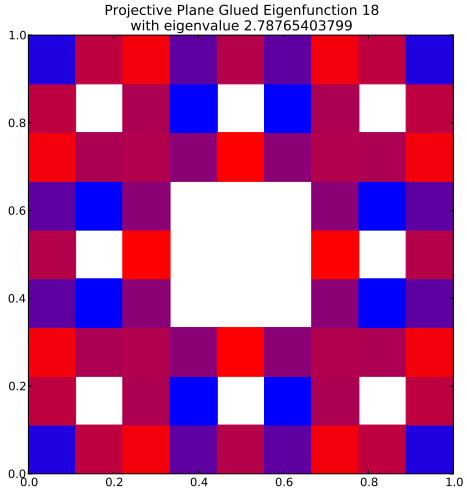
$M = 3$ Eigenfunction 18 has eigenvalue 0.534939143165





Compare to $m = 2$ eigenspace with eigenvalue 2.78765403799

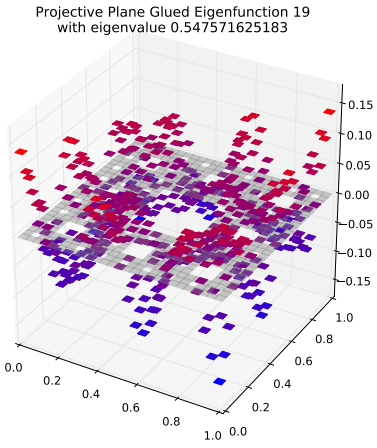


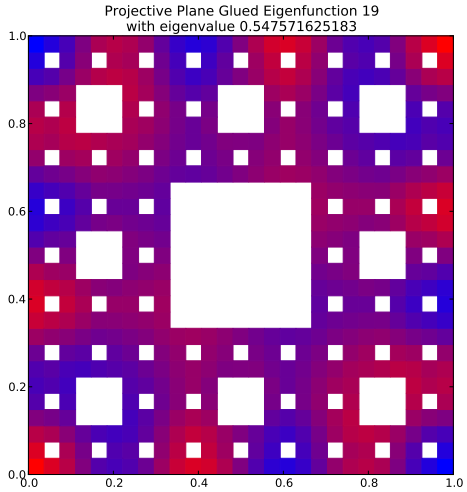


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.191895814859$
Dot Value: 0.13936823348128213

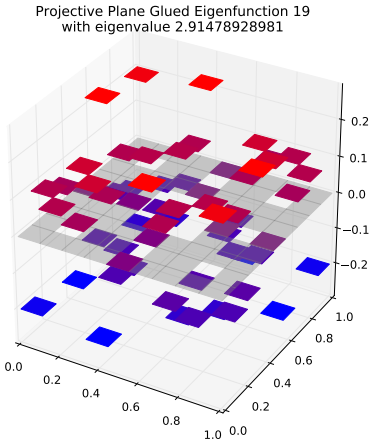
20 $M = 3$ Eigenfunction 19

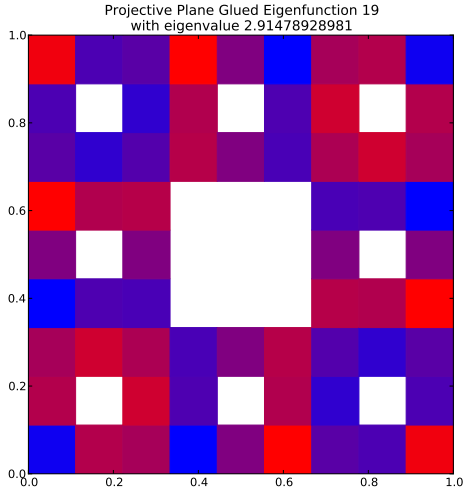
$M = 3$ Eigenfunction 19 has eigenvalue 0.547571625183





Compare to $m = 2$ eigenspace with eigenvalue 2.91478928981

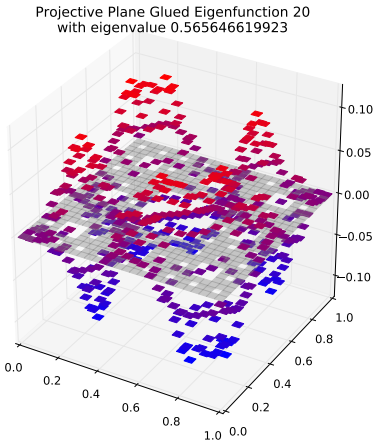


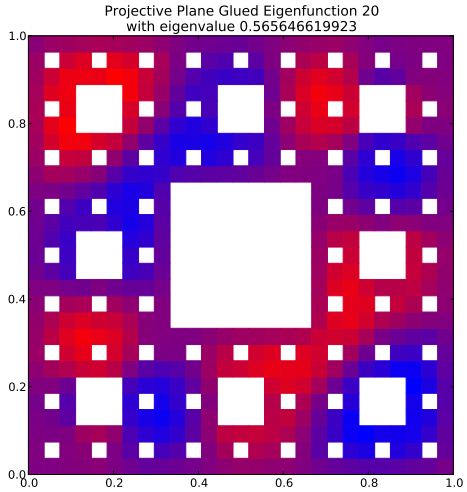


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.187859763001$
Dot Value: 0.020649452413137426

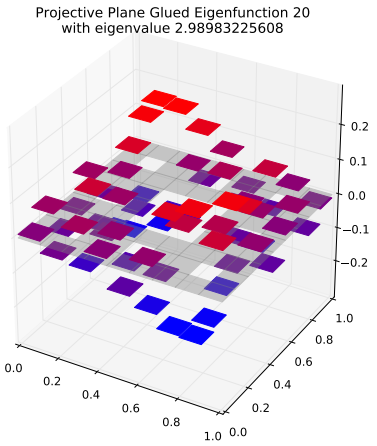
21 $M = 3$ Eigenfunction 20

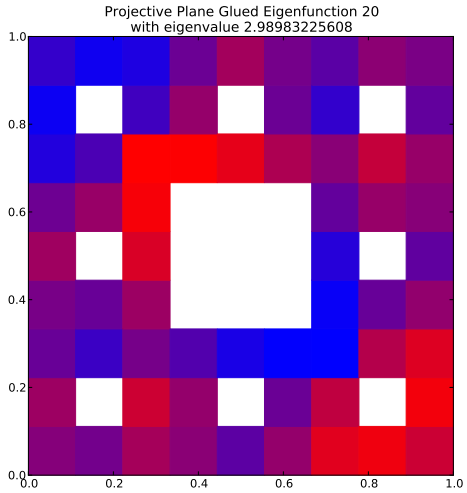
$M = 3$ Eigenfunction 20 has eigenvalue 0.565646619923





Compare to $m = 2$ eigenspace with eigenvalue 2.98983225608
(Note: Eigenspace Dimension > 1)

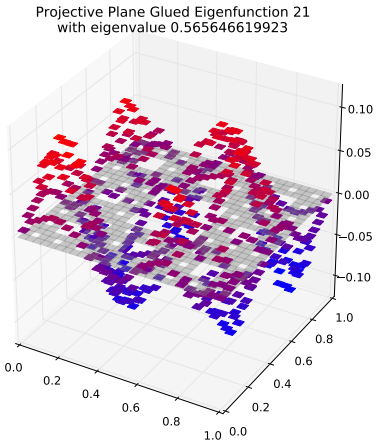


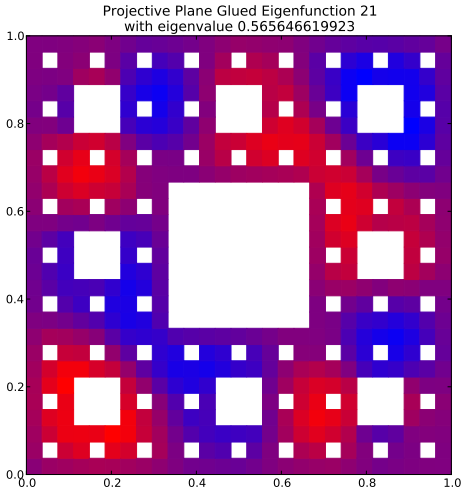


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.189190085421$
Dot Value: 0.10727115593082526

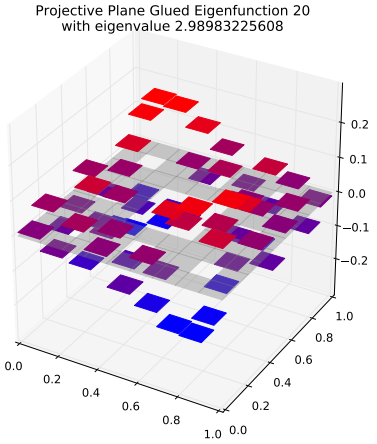
22 $M = 3$ Eigenfunction 21

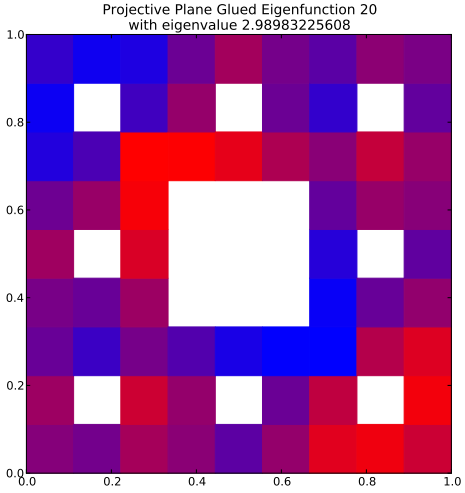
$M = 3$ Eigenfunction 21 has eigenvalue 0.565646619923





Compare to $m = 2$ eigenspace with eigenvalue 2.98983225608
(Note: Eigenspace Dimension > 1)

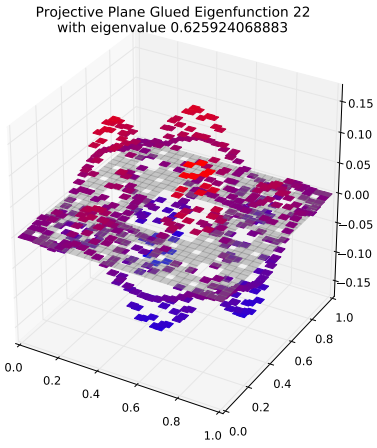


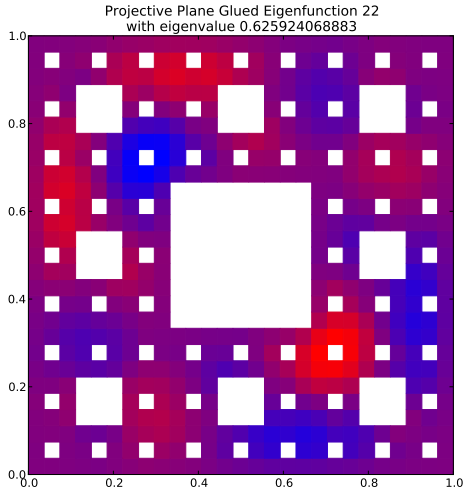


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.189190085421$
Dot Value: 0.10727115593083258

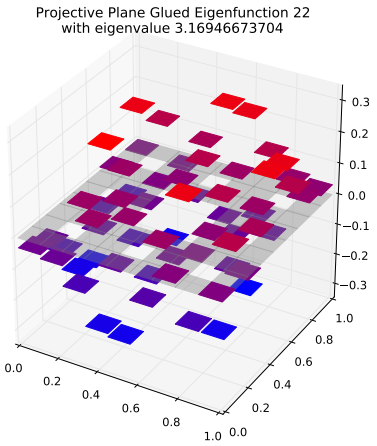
23 $M = 3$ Eigenfunction 22

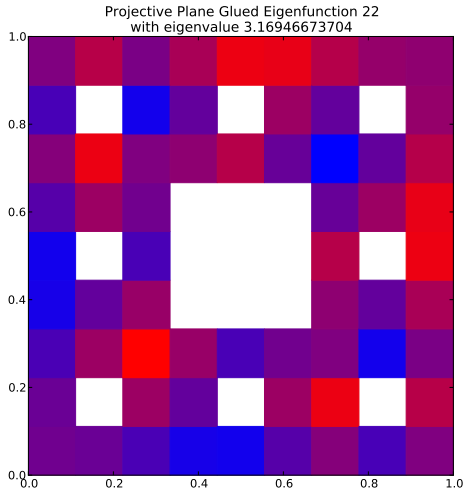
$M = 3$ Eigenfunction 22 has eigenvalue 0.625924068883





Compare to $m = 2$ eigenspace with eigenvalue 3.16946673704
(Note: Eigenspace Dimension > 1)

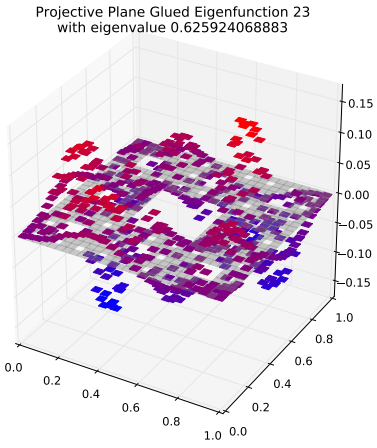


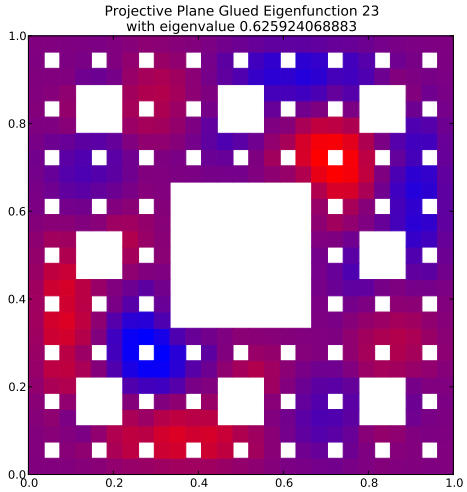


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.197485609036$
Dot Value: 0.1462234558282004

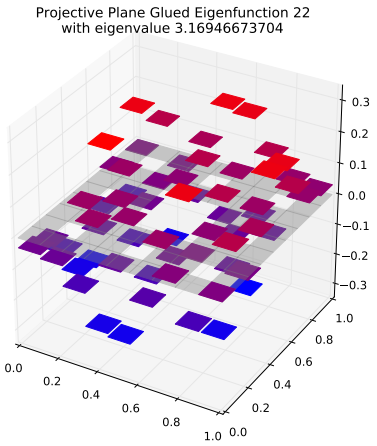
24 $M = 3$ Eigenfunction 23

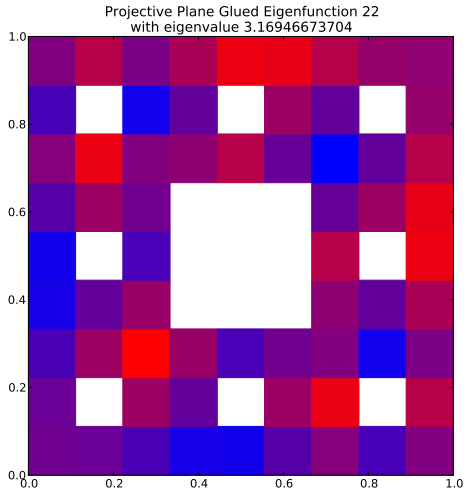
$M = 3$ Eigenfunction 23 has eigenvalue 0.625924068883





Compare to $m = 2$ eigenspace with eigenvalue 3.16946673704
(Note: Eigenspace Dimension > 1)

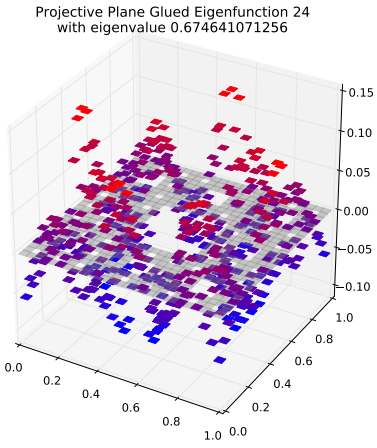


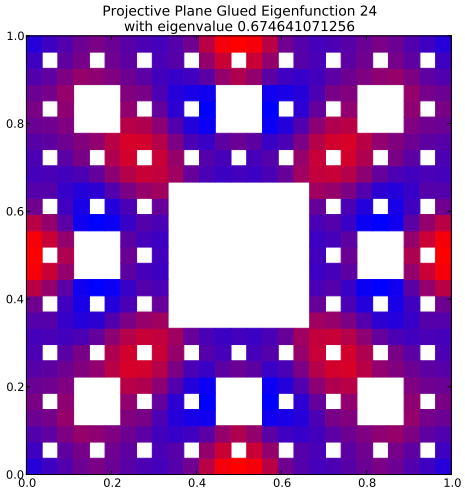


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.197485609036$
Dot Value: 0.14622345582819962

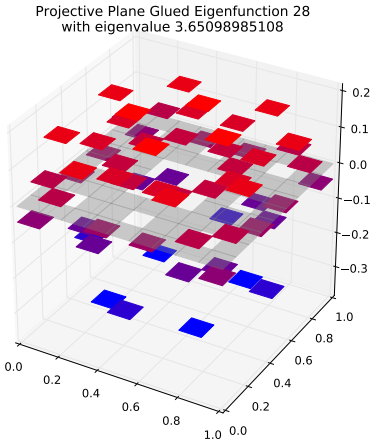
25 $M = 3$ Eigenfunction 24

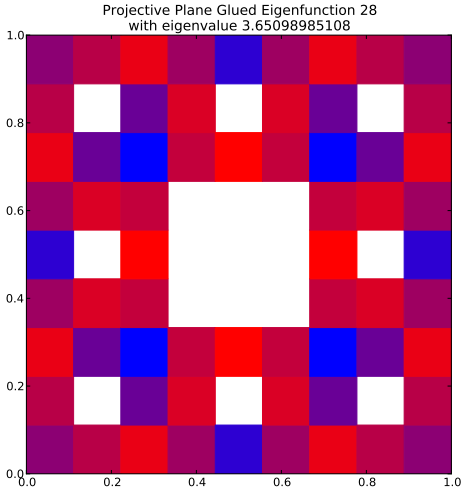
$M = 3$ Eigenfunction 24 has eigenvalue 0.674641071256





Compare to $m = 2$ eigenspace with eigenvalue 3.65098985108

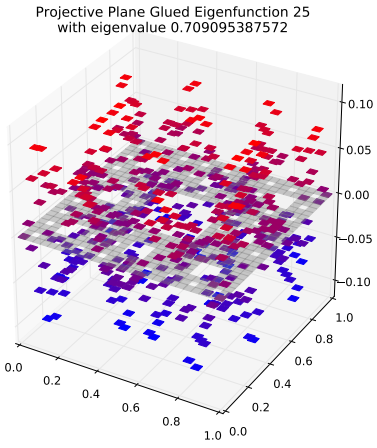


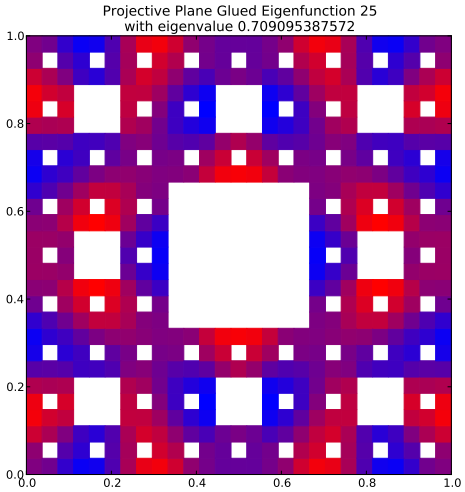


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.184783058506$
Dot Value: 0.15199842905627303

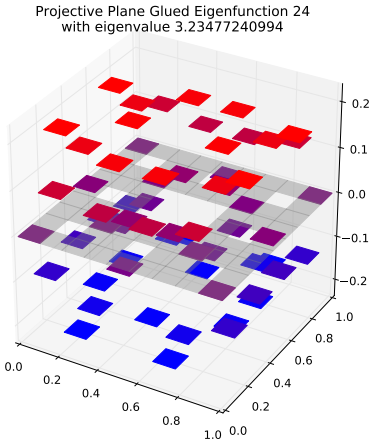
26 $M = 3$ Eigenfunction 25

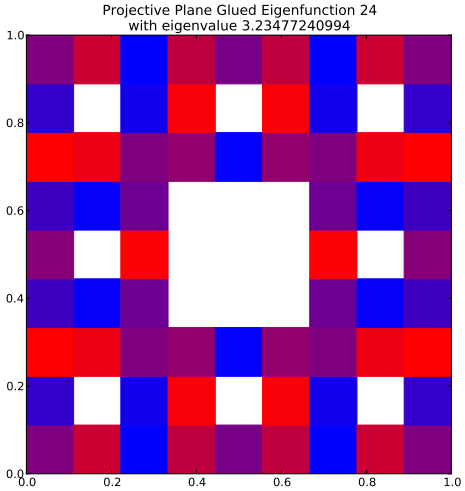
$M = 3$ Eigenfunction 25 has eigenvalue 0.709095387572





Compare to $m = 2$ eigenspace with eigenvalue 3.23477240994

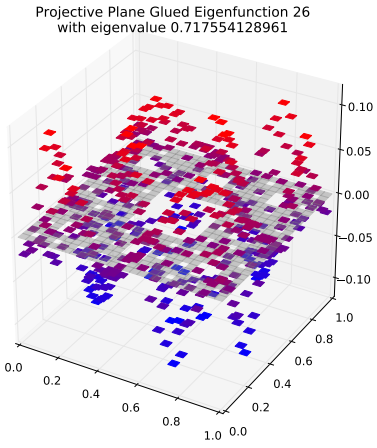


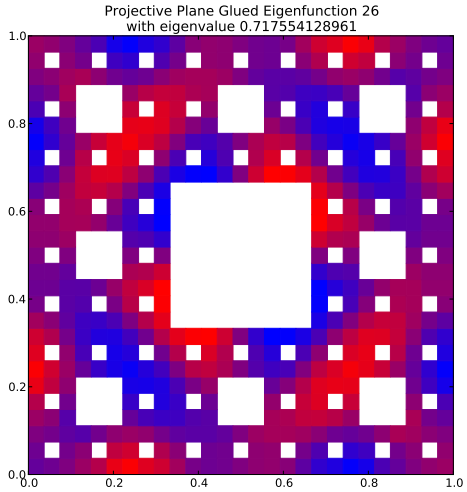


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.219210286755$
Dot Value: 0.09744720526326123

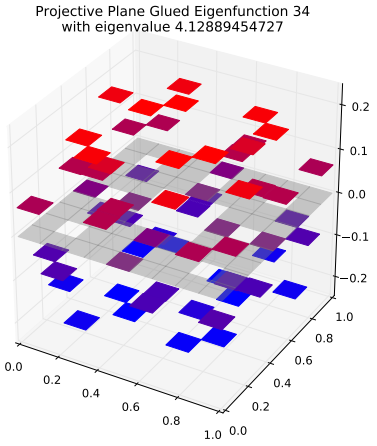
27 $M = 3$ Eigenfunction 26

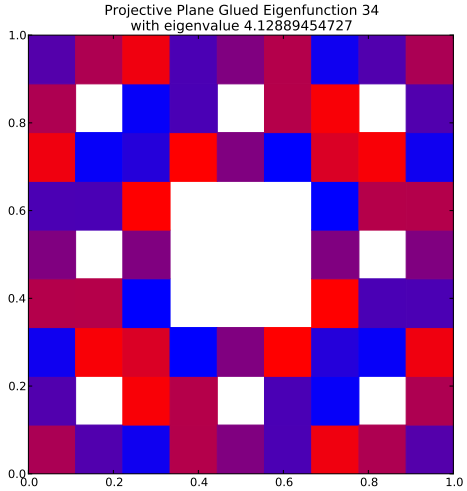
$M = 3$ Eigenfunction 26 has eigenvalue 0.717554128961





Compare to $m = 2$ eigenspace with eigenvalue 4.12889454727

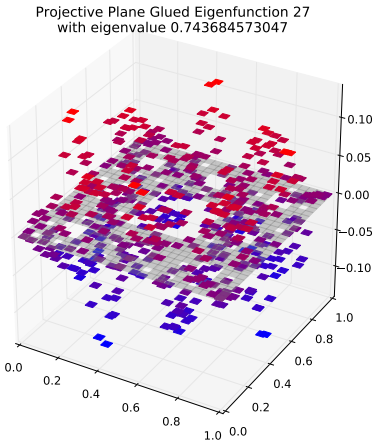


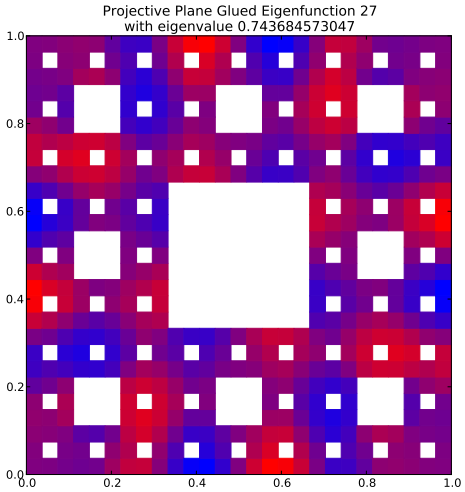


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.173788436771$
Dot Value: 0.012681577596699856

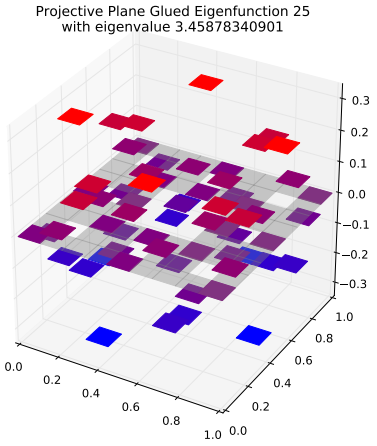
28 $M = 3$ Eigenfunction 27

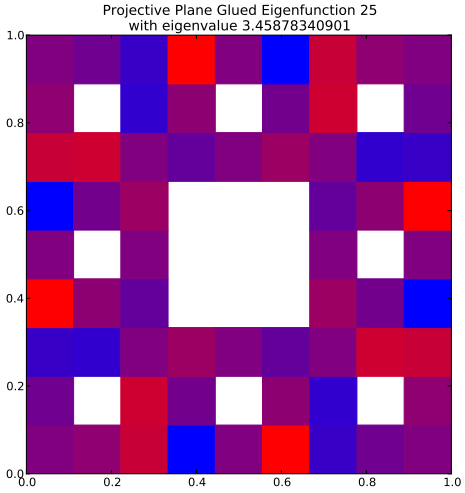
$M = 3$ Eigenfunction 27 has eigenvalue 0.743684573047





Compare to $m = 2$ eigenspace with eigenvalue 3.45878340901

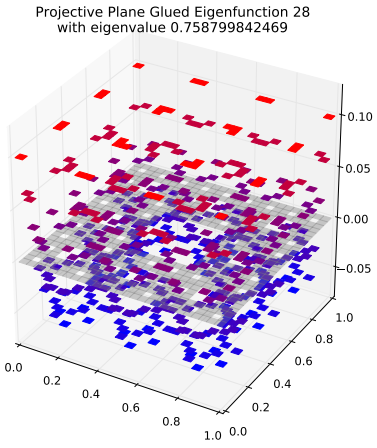


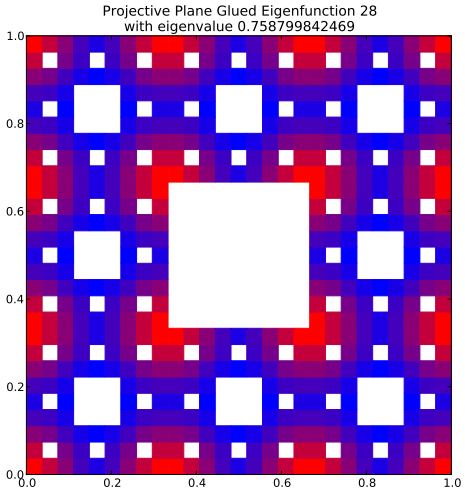


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.215013339983$
Dot Value: 0.17245953861599883

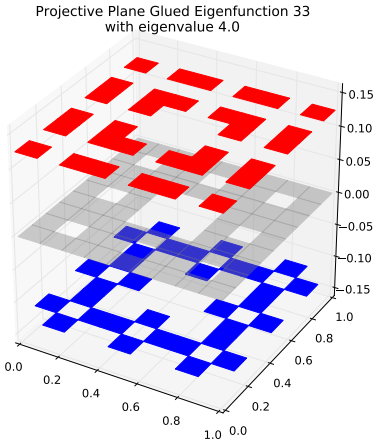
29 $M = 3$ Eigenfunction 28

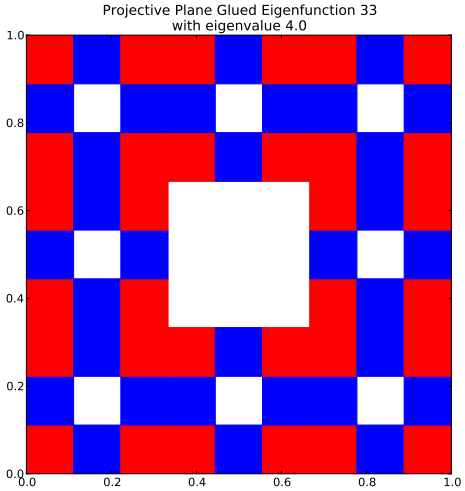
$M = 3$ Eigenfunction 28 has eigenvalue 0.758799842469





Compare to $m = 2$ eigenspace with eigenvalue 4.0

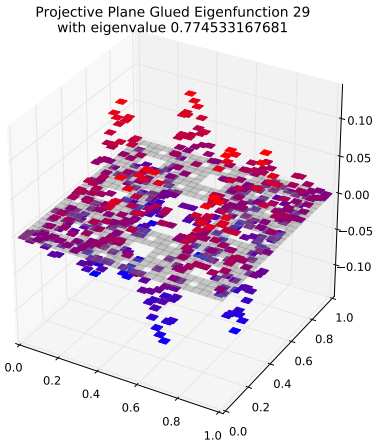


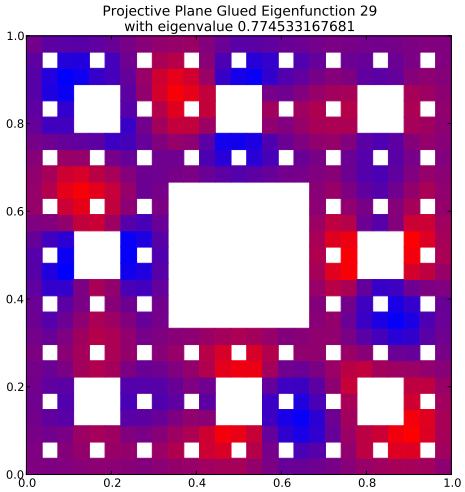


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.189699960617$
Dot Value: 0.0

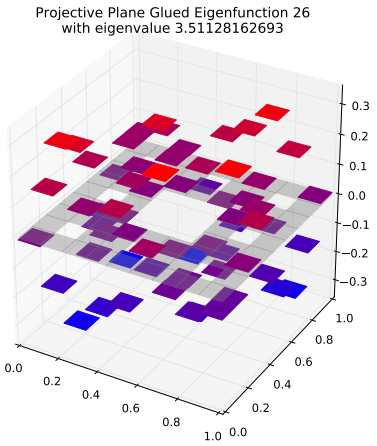
30 $M = 3$ Eigenfunction 29

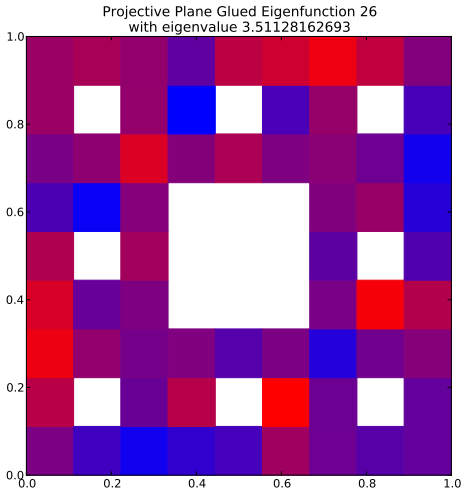
$M = 3$ Eigenfunction 29 has eigenvalue 0.774533167681





Compare to $m = 2$ eigenspace with eigenvalue 3.51128162693
(Note: Eigenspace Dimension > 1)

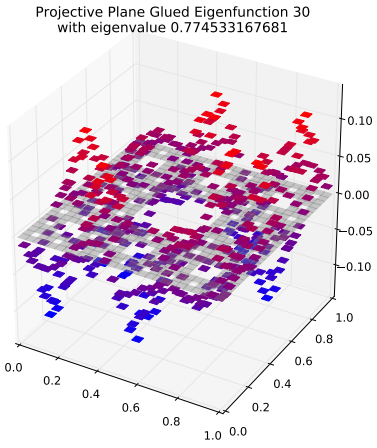


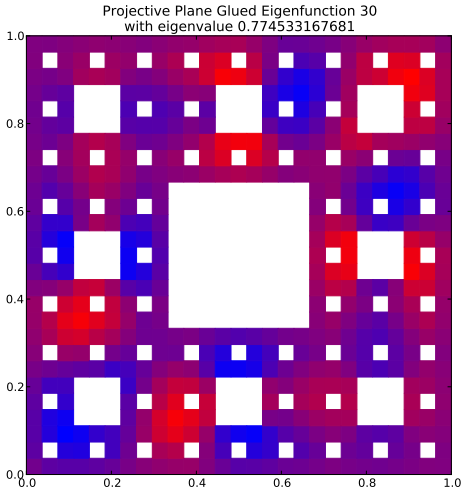


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.22058417694$
Dot Value: 0.30870546429789125

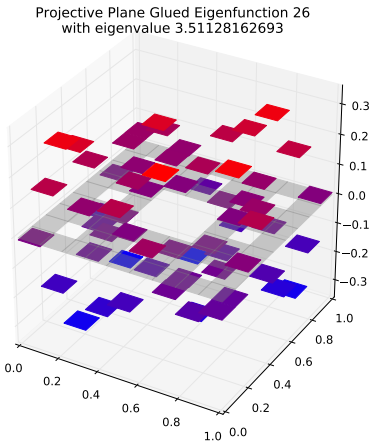
31 $M = 3$ Eigenfunction 30

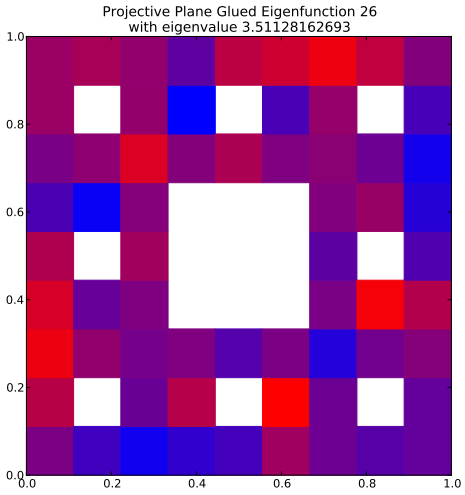
$M = 3$ Eigenfunction 30 has eigenvalue 0.774533167681





Compare to $m = 2$ eigenspace with eigenvalue 3.51128162693
(Note: Eigenspace Dimension > 1)

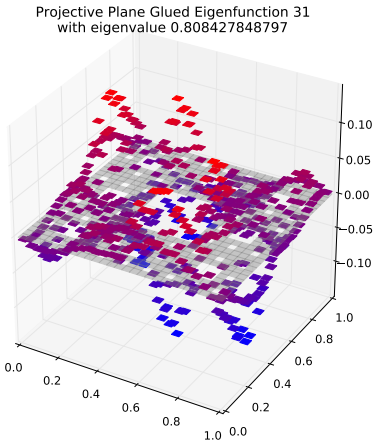


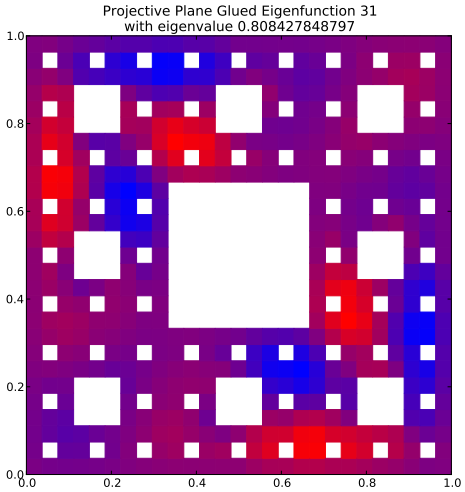


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.22058417694$
Dot Value: 0.3087054642978896

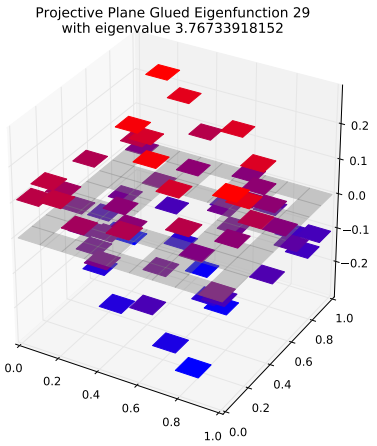
32 $M = 3$ Eigenfunction 31

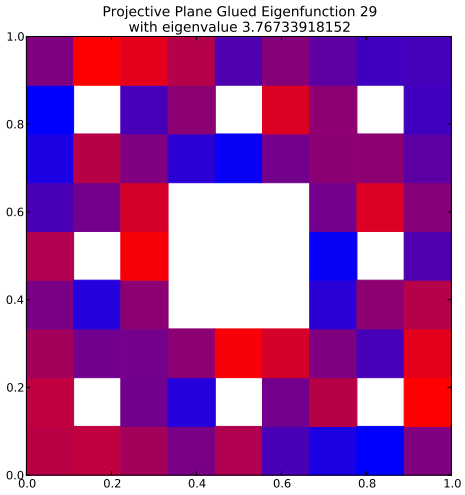
$M = 3$ Eigenfunction 31 has eigenvalue 0.808427848797





Compare to $m = 2$ eigenspace with eigenvalue 3.76733918152
(Note: Eigenspace Dimension > 1)

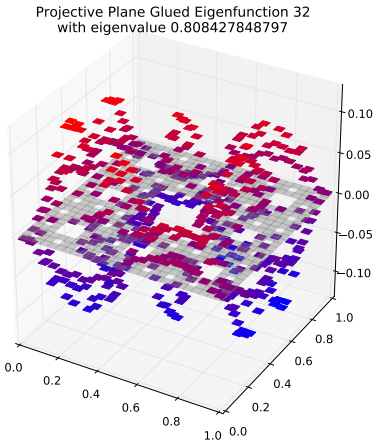


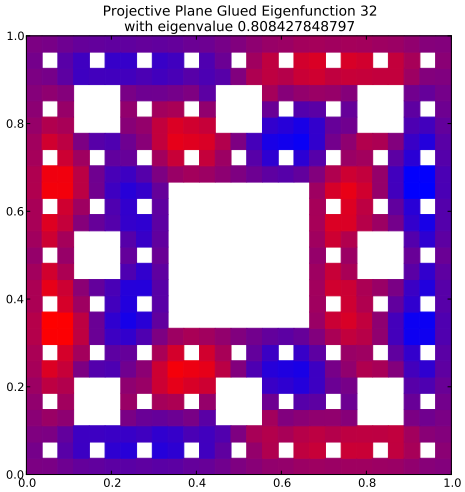


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.214588549065$
Dot Value: 0.2954368270613493

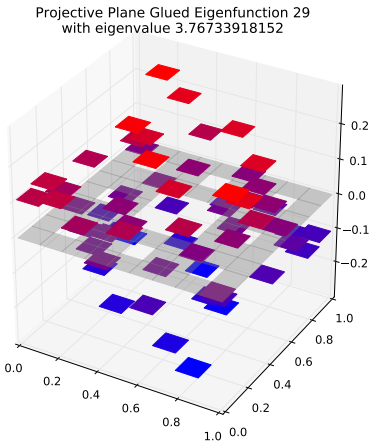
33 $M = 3$ Eigenfunction 32

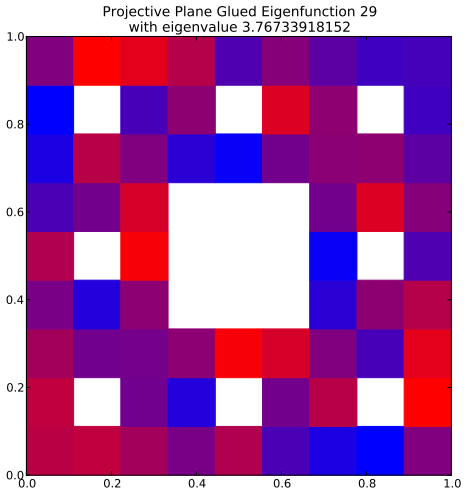
$M = 3$ Eigenfunction 32 has eigenvalue 0.808427848797





Compare to $m = 2$ eigenspace with eigenvalue 3.76733918152
(Note: Eigenspace Dimension > 1)

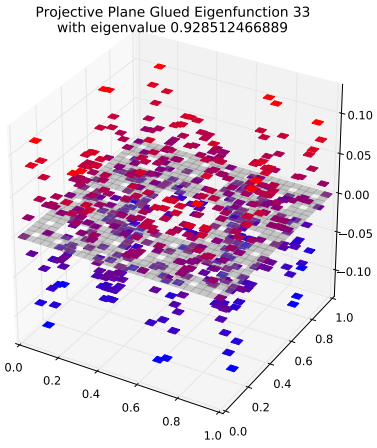


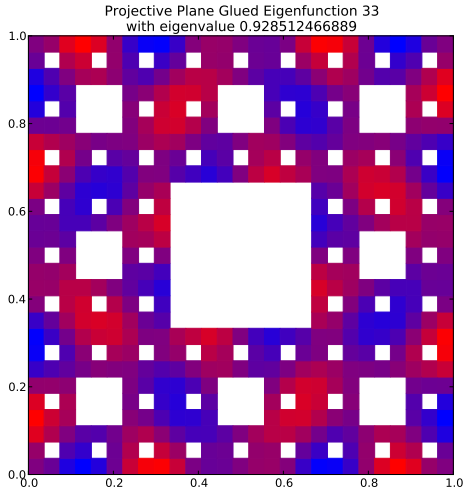


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.214588549065$
Dot Value: 0.2954368270613271

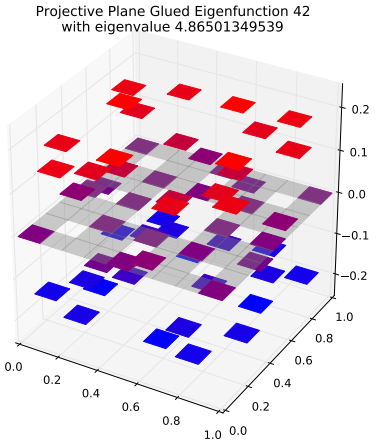
34 $M = 3$ Eigenfunction 33

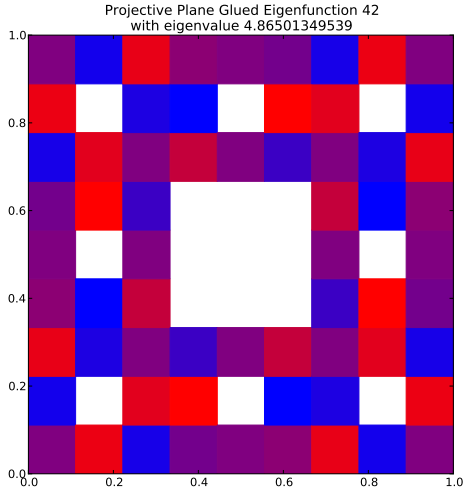
$M = 3$ Eigenfunction 33 has eigenvalue 0.928512466889





Compare to $m = 2$ eigenspace with eigenvalue 4.86501349539

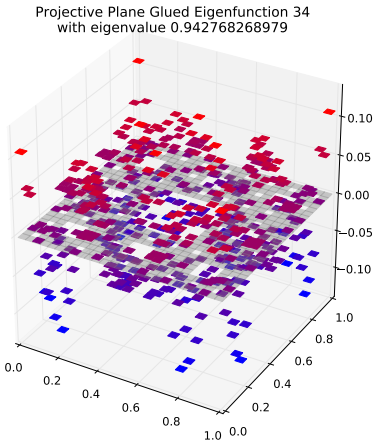


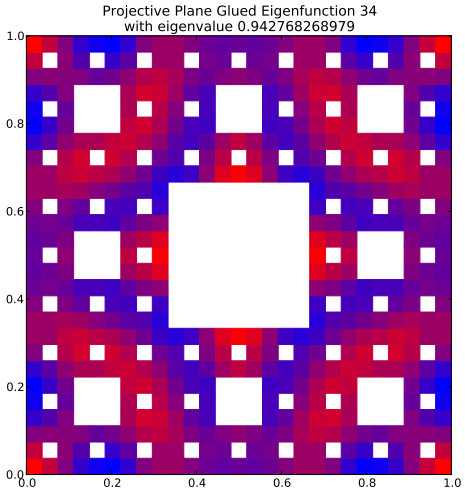


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.190855065$
Dot Value: 0.03233281594177728

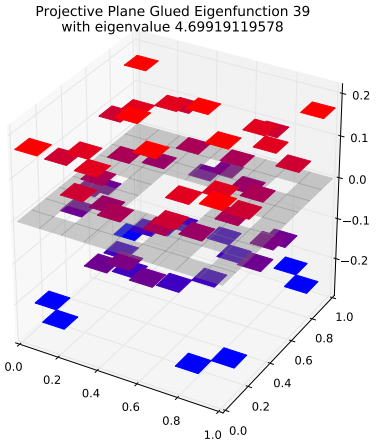
35 $M = 3$ Eigenfunction 34

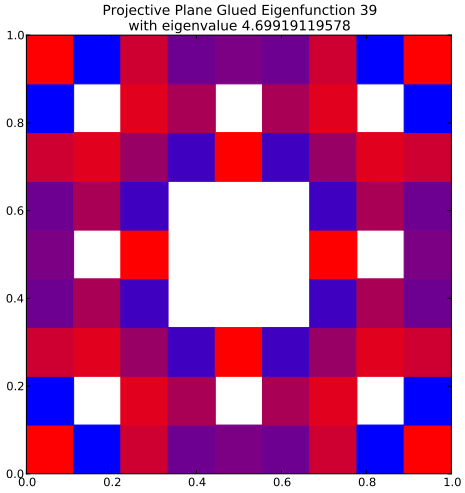
$M = 3$ Eigenfunction 34 has eigenvalue 0.942768268979





Compare to $m = 2$ eigenspace with eigenvalue 4.69919119578

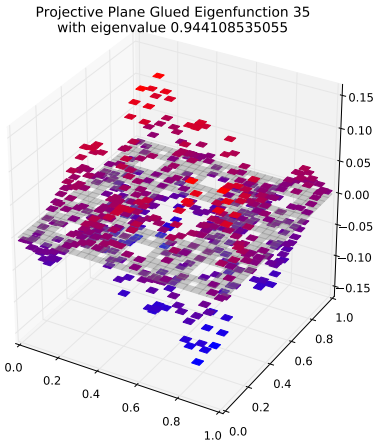


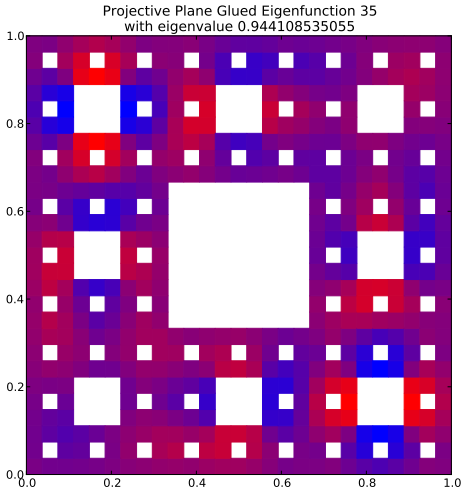


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.200623517899$
Dot Value: 0.1406970871980564

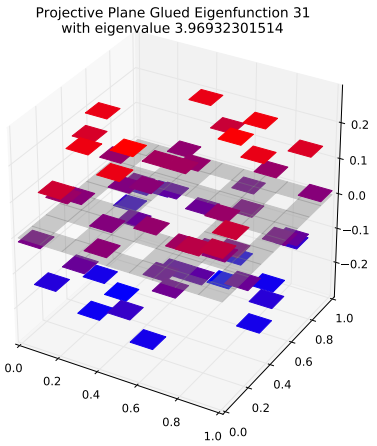
36 $M = 3$ Eigenfunction 35

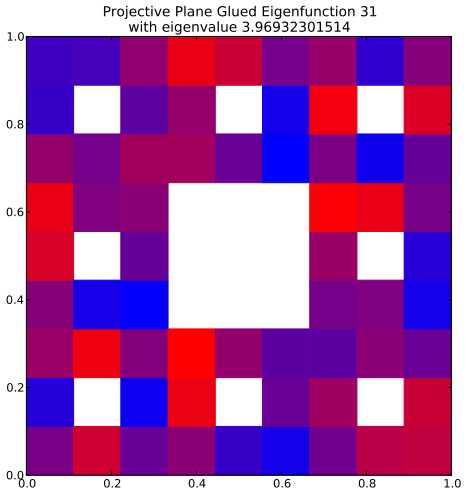
$M = 3$ Eigenfunction 35 has eigenvalue 0.944108535055





Compare to $m = 2$ eigenspace with eigenvalue 3.96932301514
(Note: Eigenspace Dimension > 1)

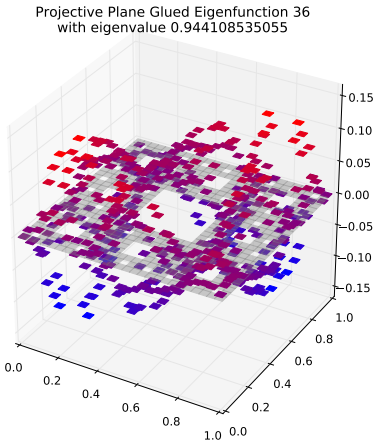


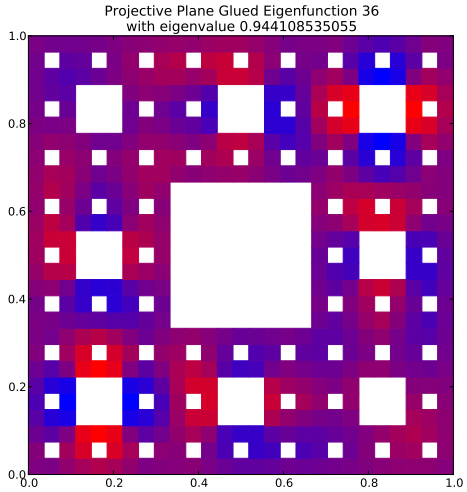


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237851273745$
Dot Value: 0.18662940620748614

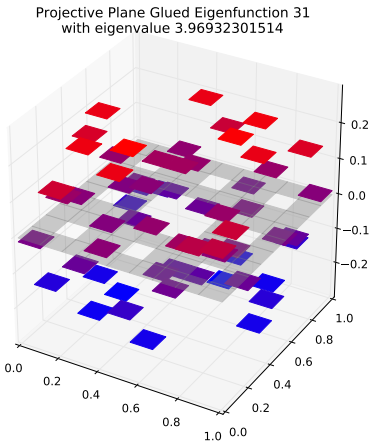
37 $M = 3$ Eigenfunction 36

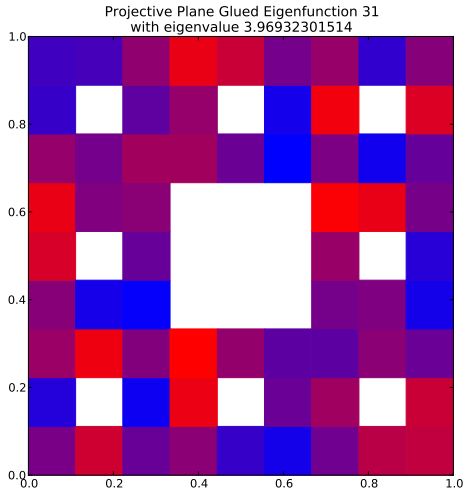
$M = 3$ Eigenfunction 36 has eigenvalue 0.944108535055





Compare to $m = 2$ eigenspace with eigenvalue 3.96932301514
(Note: Eigenspace Dimension > 1)

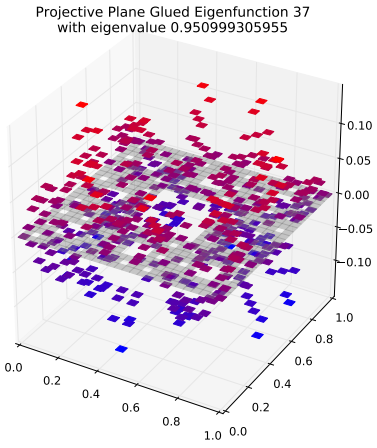


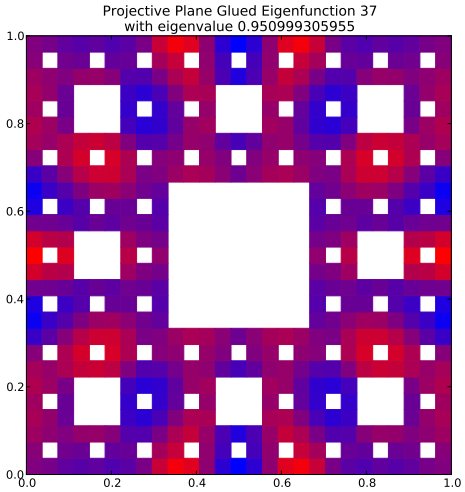


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237851273745$
Dot Value: 0.18662940620749024

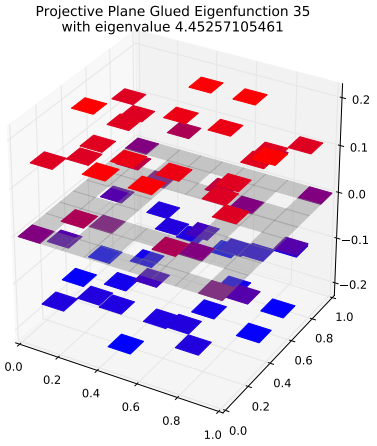
38 $M = 3$ Eigenfunction 37

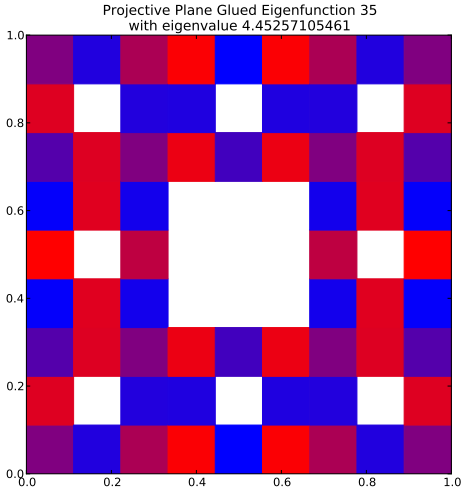
$M = 3$ Eigenfunction 37 has eigenvalue 0.950999305955





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

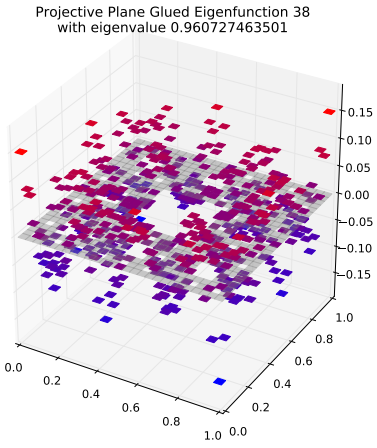


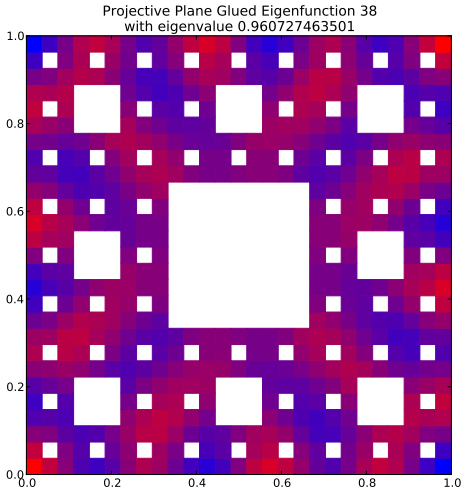


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.213584307649$
Dot Value: 0.25785727730529673

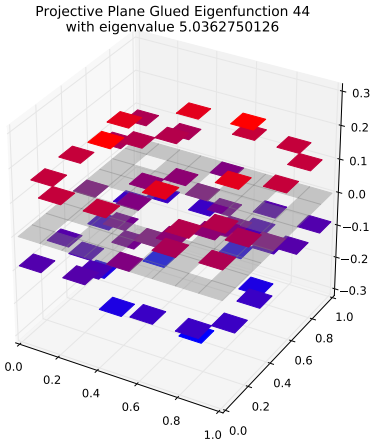
39 $M = 3$ Eigenfunction 38

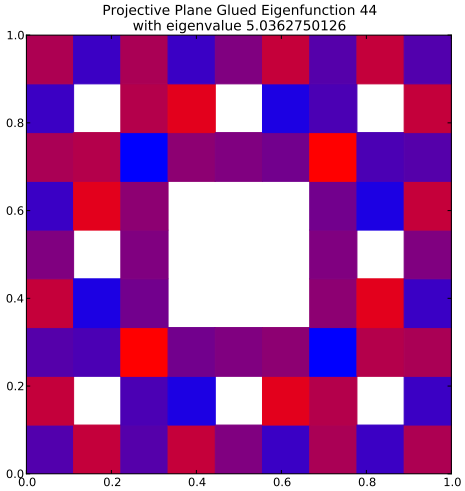
$M = 3$ Eigenfunction 38 has eigenvalue 0.960727463501





Compare to $m = 2$ eigenspace with eigenvalue 5.0362750126

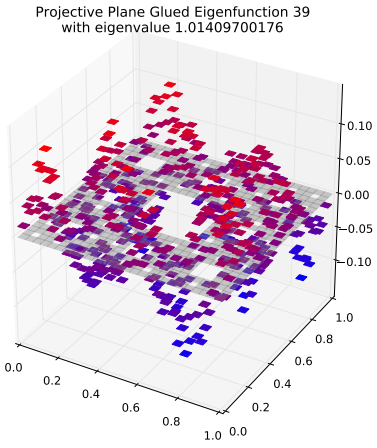


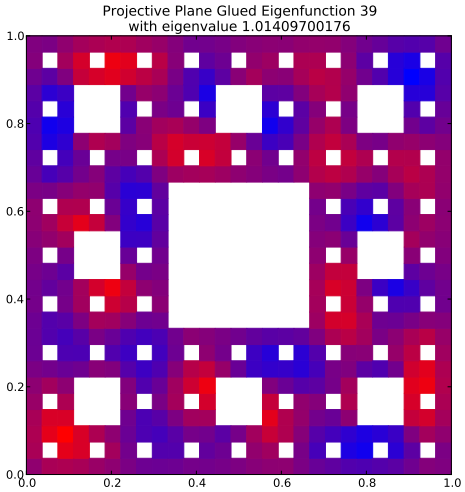


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.19076151741$
Dot Value: 0.08347280612342267

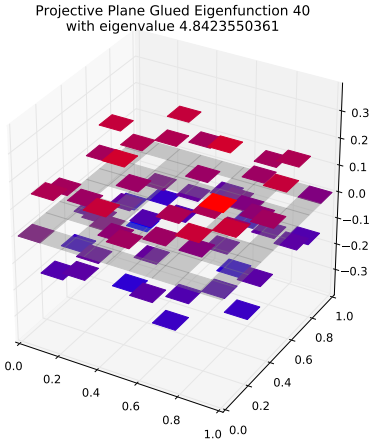
40 $M = 3$ Eigenfunction 39

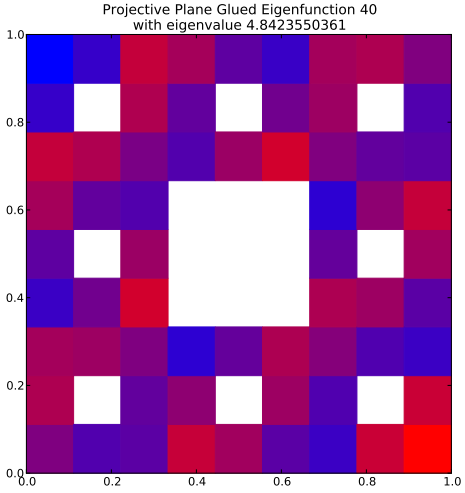
$M = 3$ Eigenfunction 39 has eigenvalue 1.01409700176





Compare to $m = 2$ eigenspace with eigenvalue 4.8423550361
(Note: Eigenspace Dimension > 1)

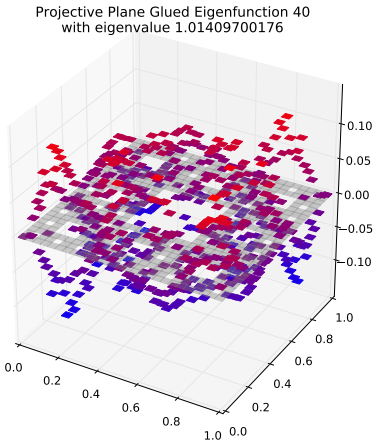


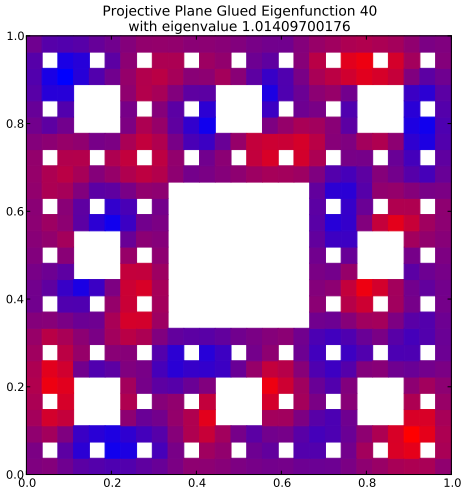


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.209422273707$
Dot Value: 0.18336585417922457

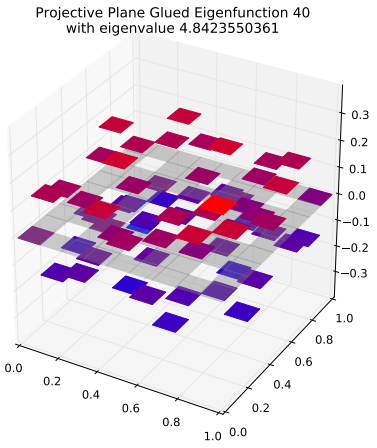
41 $M = 3$ Eigenfunction 40

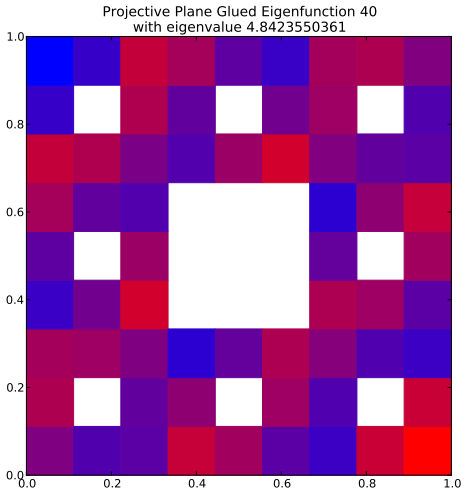
$M = 3$ Eigenfunction 40 has eigenvalue 1.01409700176





Compare to $m = 2$ eigenspace with eigenvalue 4.8423550361
(Note: Eigenspace Dimension > 1)

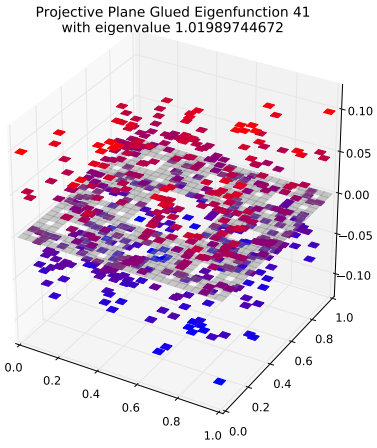


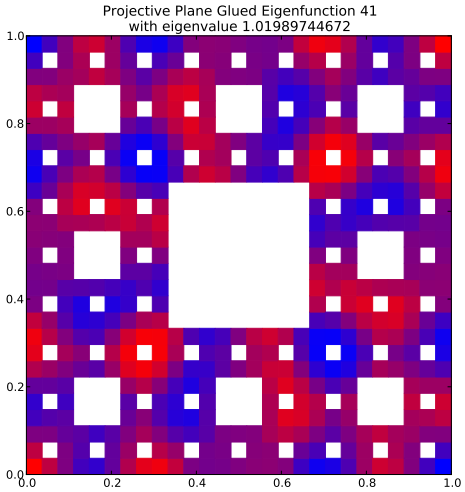


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.209422273707$
Dot Value: 0.18336585417922457

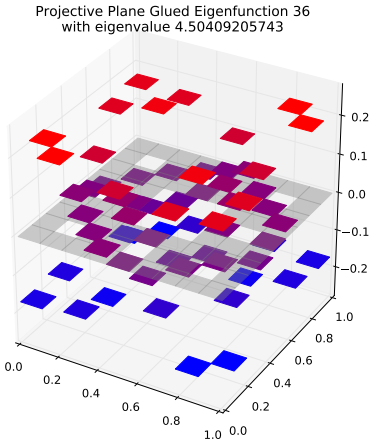
42 $M = 3$ Eigenfunction 41

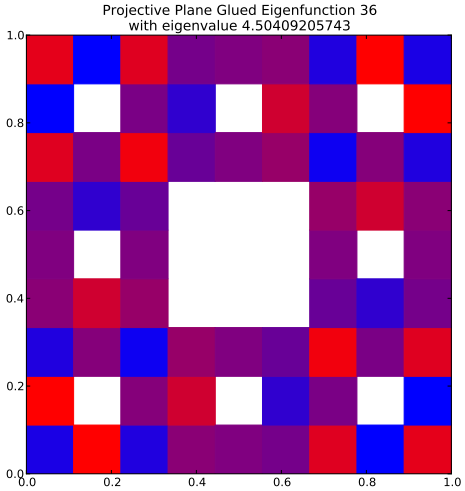
$M = 3$ Eigenfunction 41 has eigenvalue 1.01989744672





Compare to $m = 2$ eigenspace with eigenvalue 4.50409205743

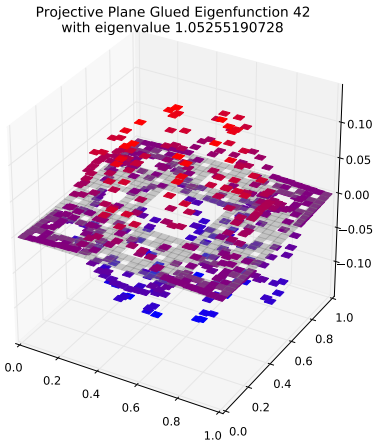


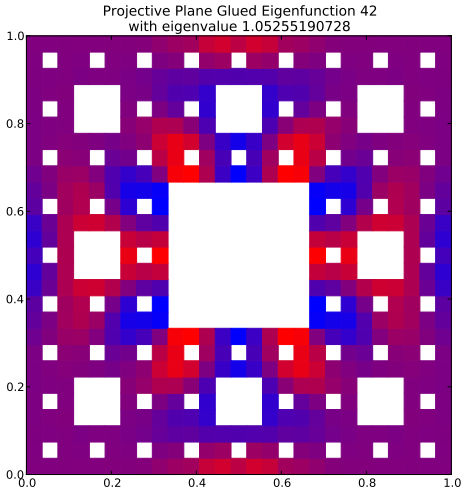


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.226437966568$
Dot Value: 0.09278219317442538

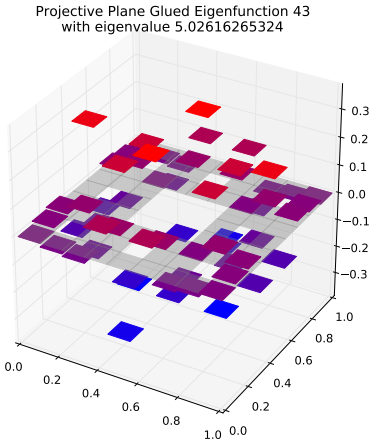
43 $M = 3$ Eigenfunction 42

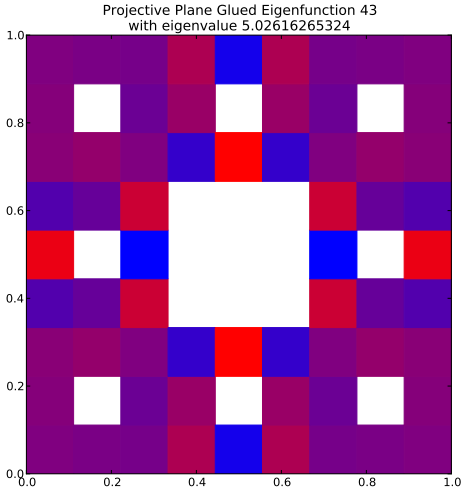
$M = 3$ Eigenfunction 42 has eigenvalue 1.05255190728





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

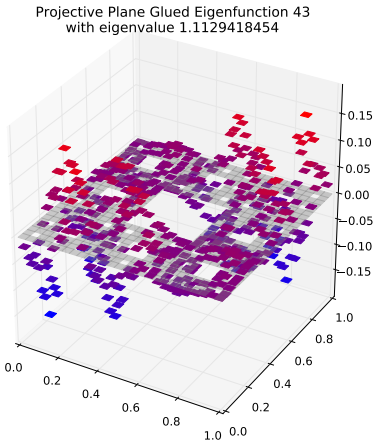


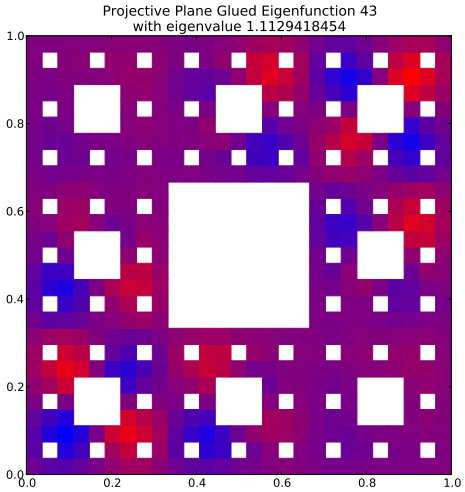


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.209414613075$
Dot Value: 0.19535037200805416

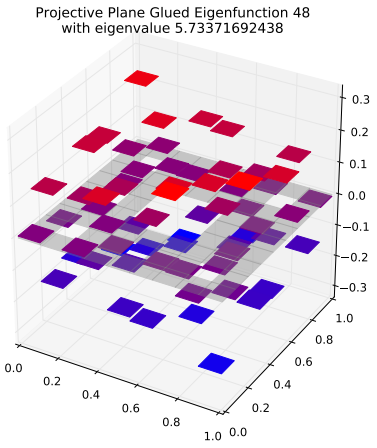
44 $M = 3$ Eigenfunction 43

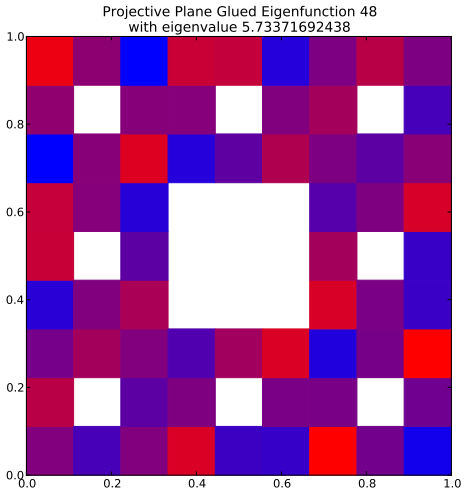
$M = 3$ Eigenfunction 43 has eigenvalue 1.1129418454





Compare to $m = 2$ eigenspace with eigenvalue 5.73371692438
(Note: Eigenspace Dimension > 1)

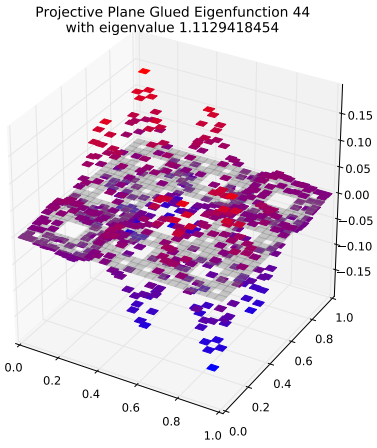


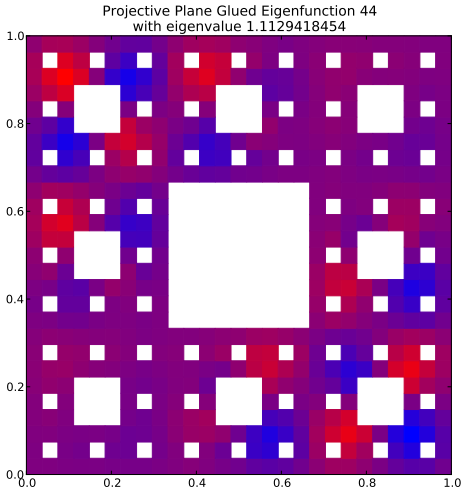


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.194104777072$
Dot Value: 0.12542904916261732

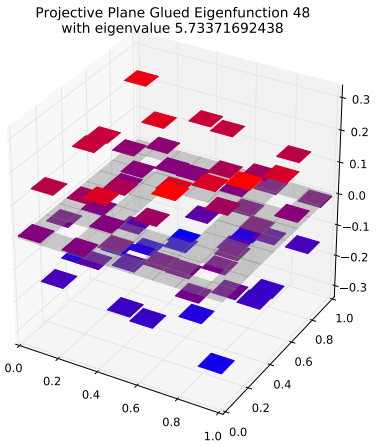
45 $M = 3$ Eigenfunction 44

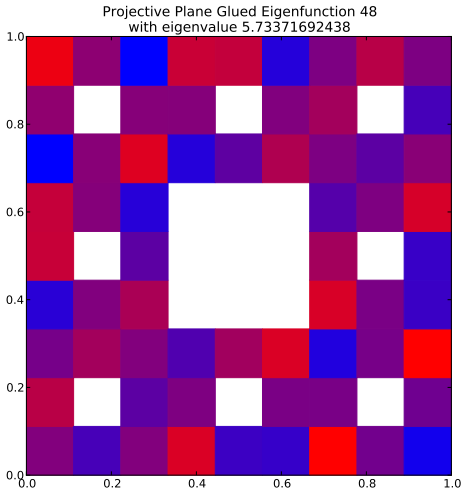
$M = 3$ Eigenfunction 44 has eigenvalue 1.1129418454





Compare to $m = 2$ eigenspace with eigenvalue 5.73371692438
(Note: Eigenspace Dimension > 1)

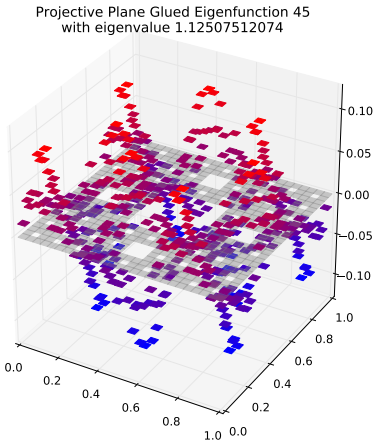


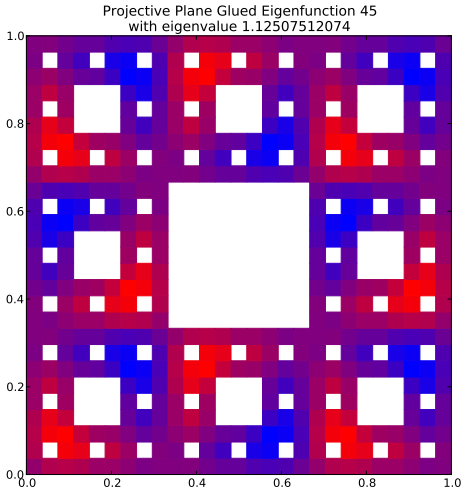


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.194104777072$
Dot Value: 0.1254290491626212

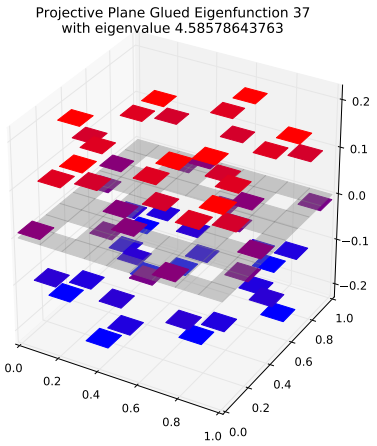
46 $M = 3$ Eigenfunction 45

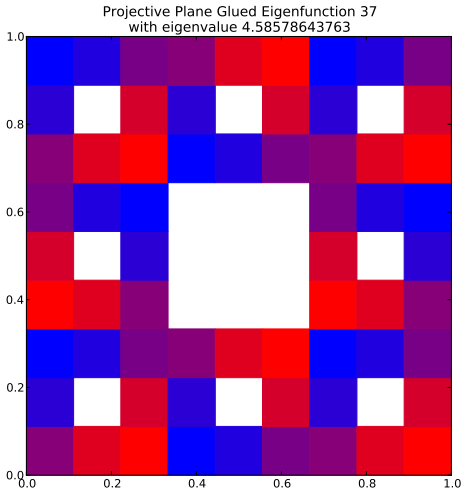
$M = 3$ Eigenfunction 45 has eigenvalue 1.12507512074





Compare to $m = 2$ eigenspace with eigenvalue 4.58578643763
(Note: Eigenspace Dimension > 1)

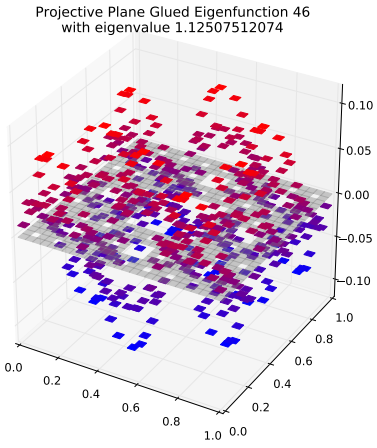


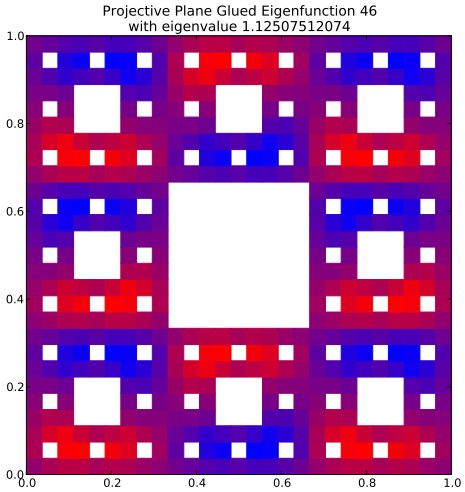


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.245339624085$
Dot Value: 0.0006505301638105587

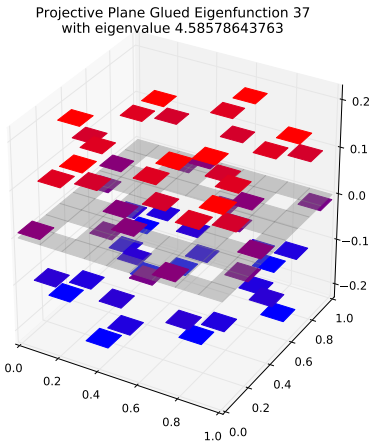
47 $M = 3$ Eigenfunction 46

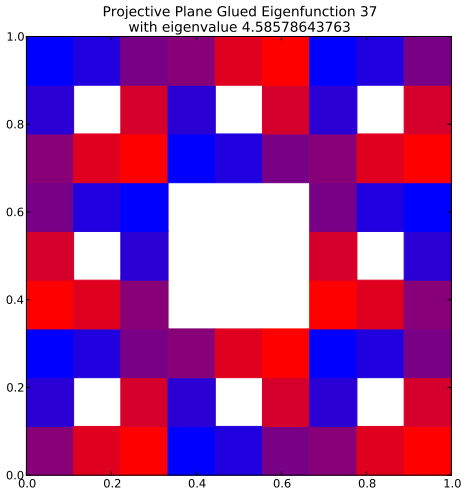
$M = 3$ Eigenfunction 46 has eigenvalue 1.12507512074





Compare to $m = 2$ eigenspace with eigenvalue 4.58578643763
(Note: Eigenspace Dimension > 1)

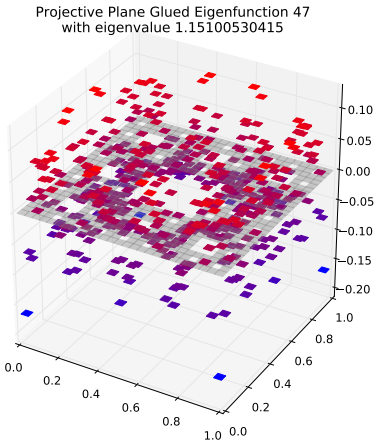


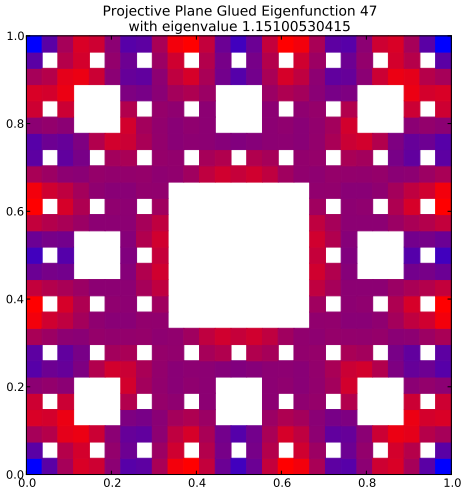


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.245339624085$
Dot Value: 0.0006505301638103367

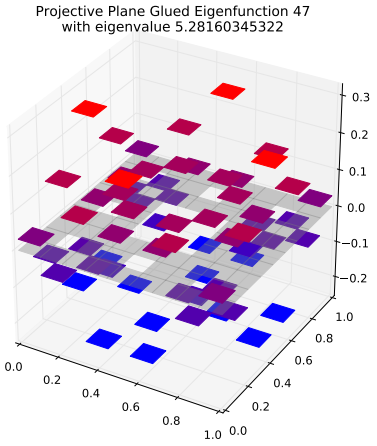
48 $M = 3$ Eigenfunction 47

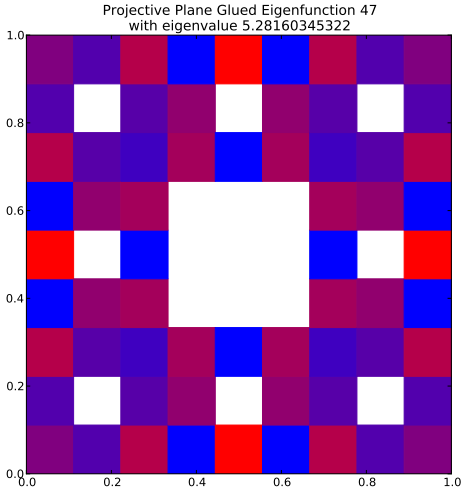
$M = 3$ Eigenfunction 47 has eigenvalue 1.15100530415





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

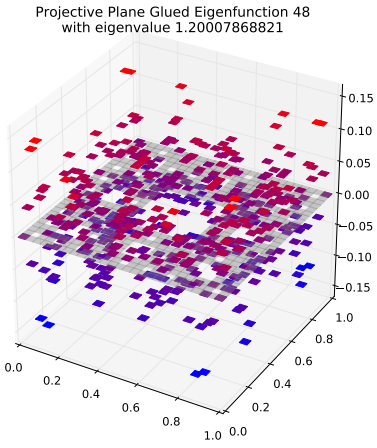


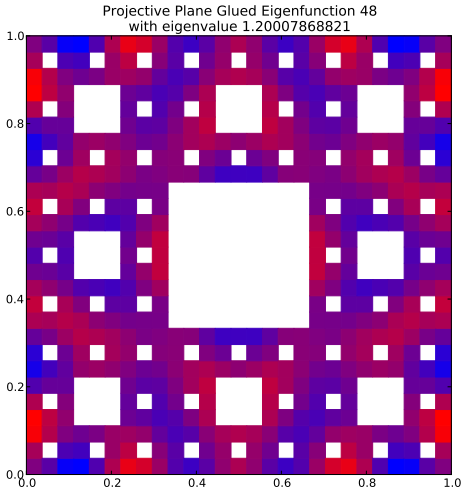


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.217927247728$
Dot Value: 0.1306412151169133

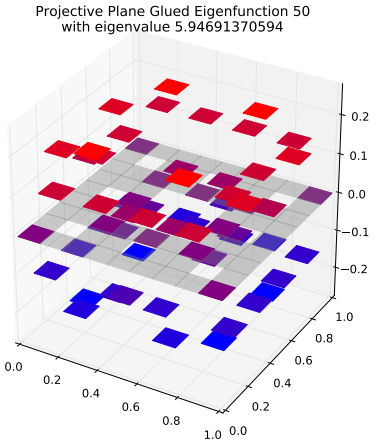
49 $M = 3$ Eigenfunction 48

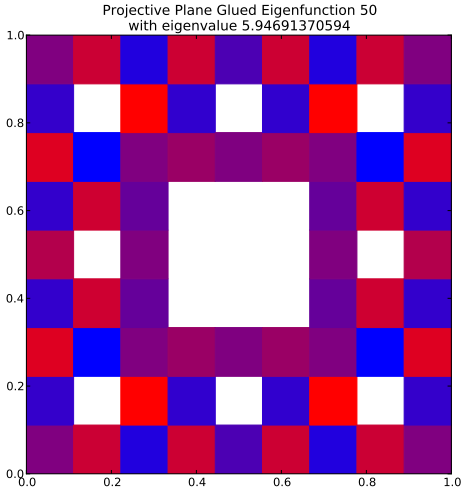
$M = 3$ Eigenfunction 48 has eigenvalue 1.20007868821





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

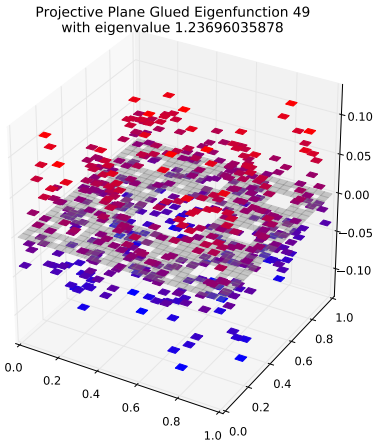


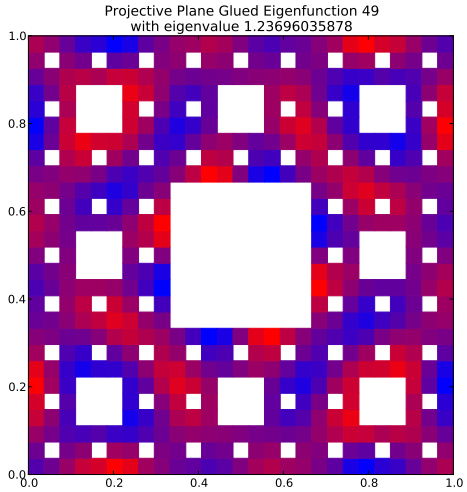


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.201798571083$
Dot Value: 0.09999860002487682

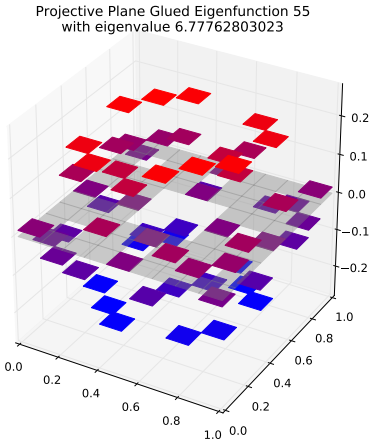
50 $M = 3$ Eigenfunction 49

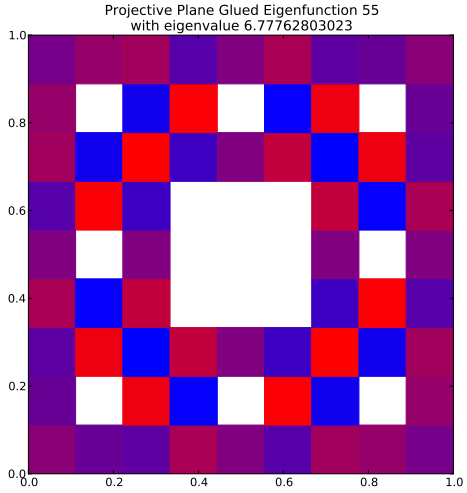
$M = 3$ Eigenfunction 49 has eigenvalue 1.23696035878





Compare to $m = 2$ eigenspace with eigenvalue 6.77762803023

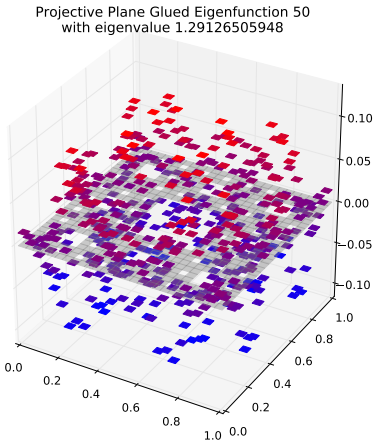


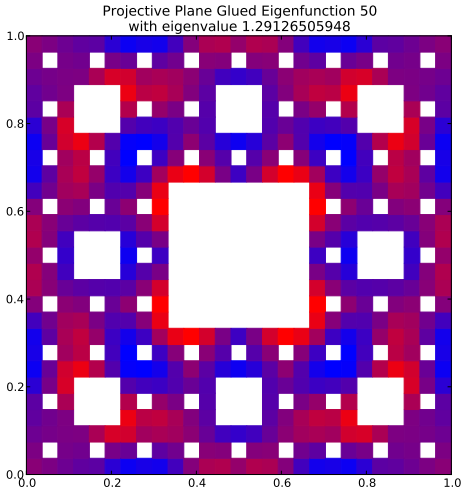


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.182506380295$
Dot Value: 0.04335567486896852

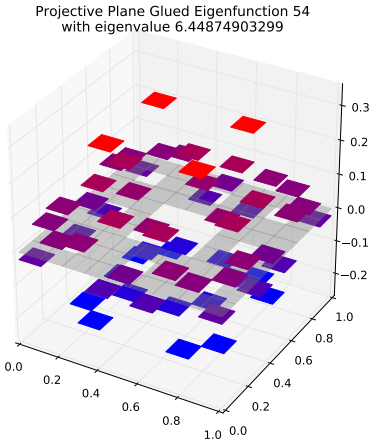
51 $M = 3$ Eigenfunction 50

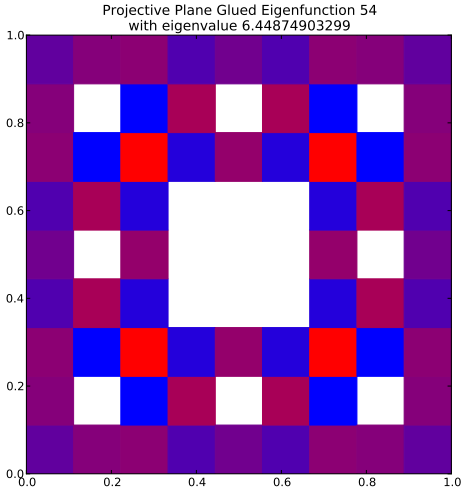
$M = 3$ Eigenfunction 50 has eigenvalue 1.29126505948





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

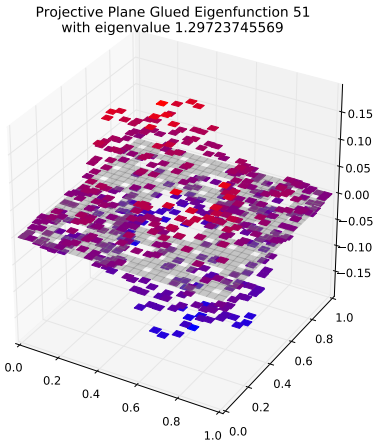


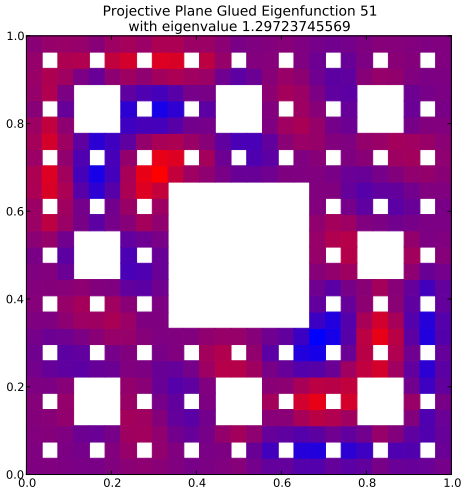


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.200234968499$
Dot Value: 0.1199105458179065

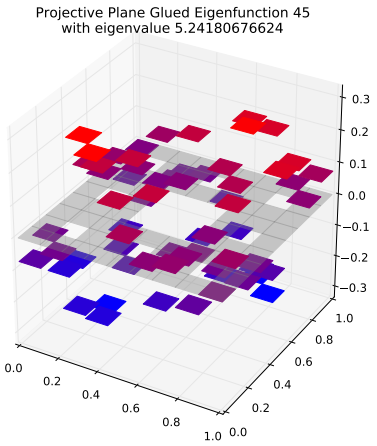
52 $M = 3$ Eigenfunction 51

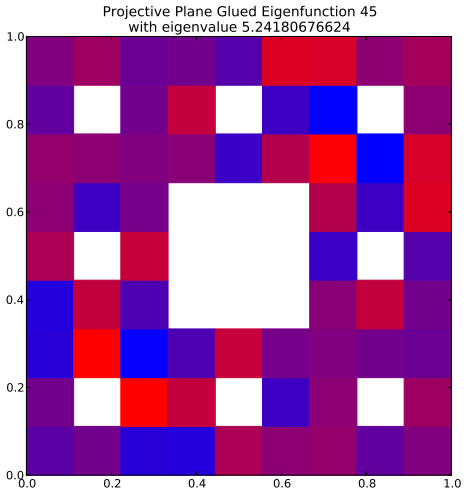
$M = 3$ Eigenfunction 51 has eigenvalue 1.29723745569





Compare to $m = 2$ eigenspace with eigenvalue 5.24180676624
(Note: Eigenspace Dimension > 1)

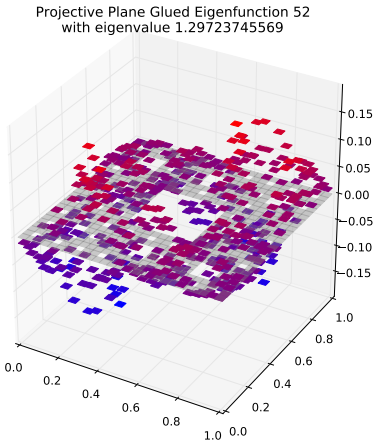


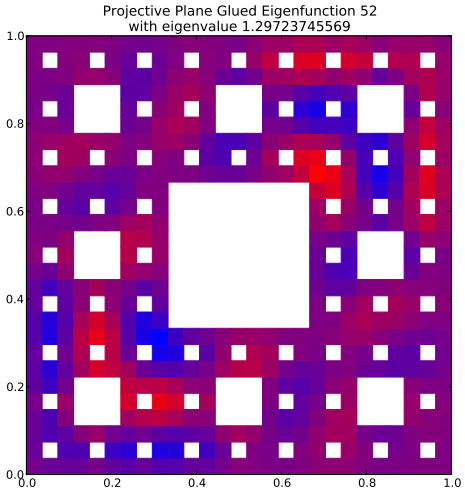


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.247479068486$
Dot Value: 0.04554051756117905

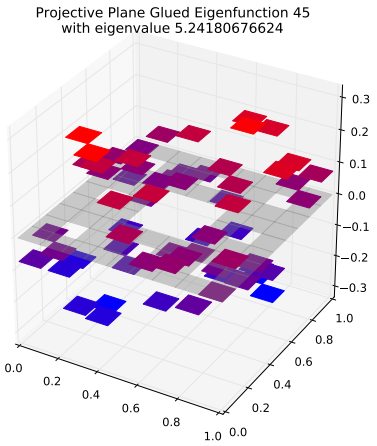
53 $M = 3$ Eigenfunction 52

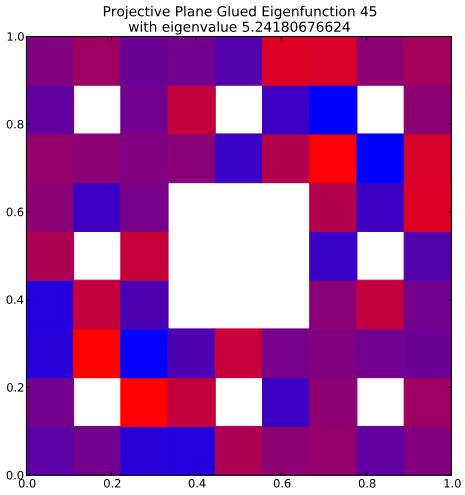
$M = 3$ Eigenfunction 52 has eigenvalue 1.29723745569





Compare to $m = 2$ eigenspace with eigenvalue 5.24180676624
(Note: Eigenspace Dimension > 1)

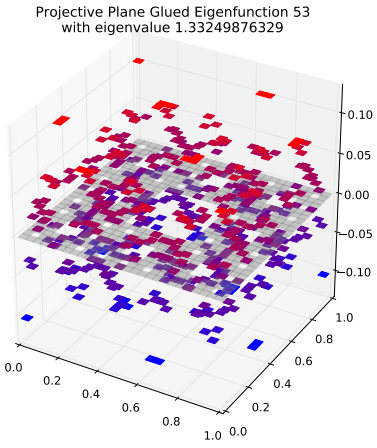


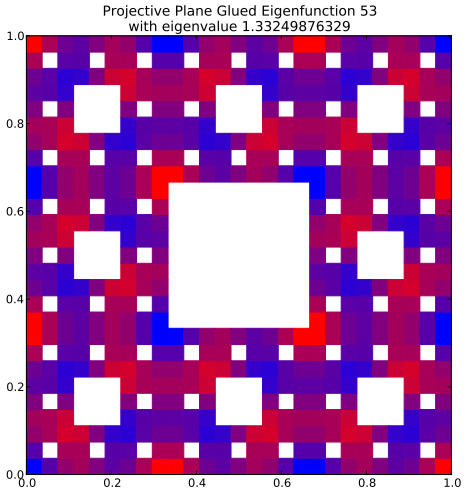


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.247479068486$
Dot Value: 0.04554051756117905

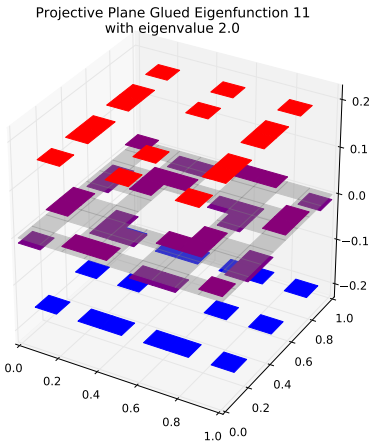
54 $M = 3$ Eigenfunction 53

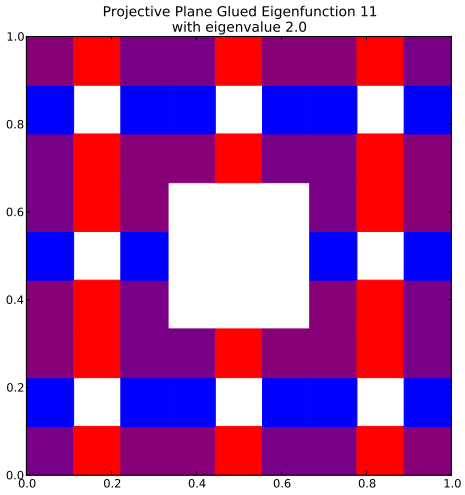
$M = 3$ Eigenfunction 53 has eigenvalue 1.33249876329





Compare to $m = 2$ eigenspace with eigenvalue 2.0
(Note: Eigenspace Dimension > 1)

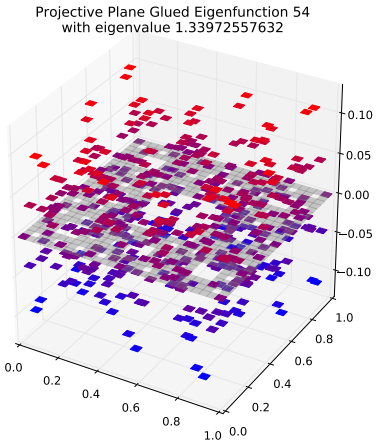


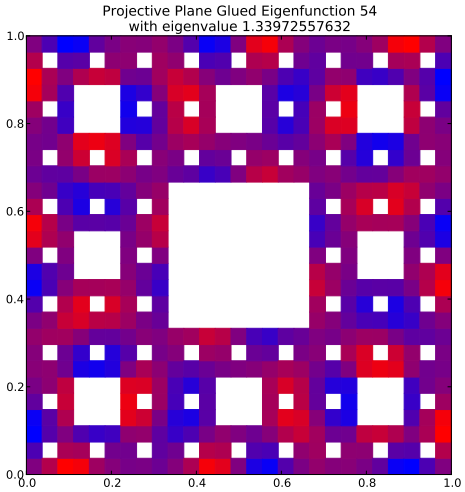


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.666249381646$
Dot Value: 2.220446049250313e-16

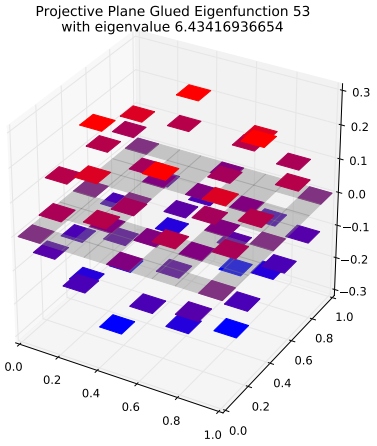
55 $M = 3$ Eigenfunction 54

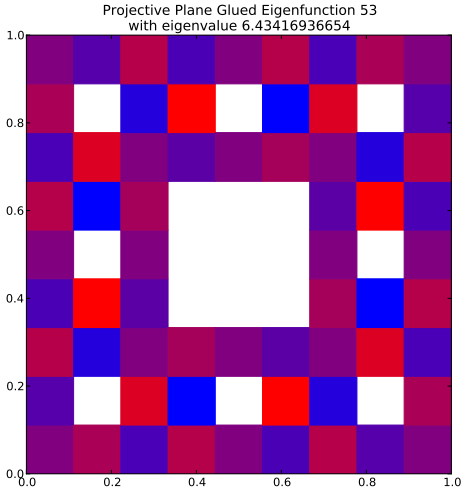
$M = 3$ Eigenfunction 54 has eigenvalue 1.33972557632





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

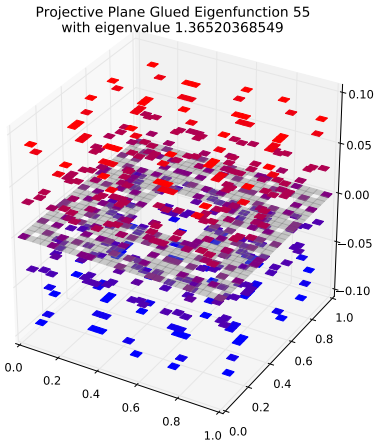


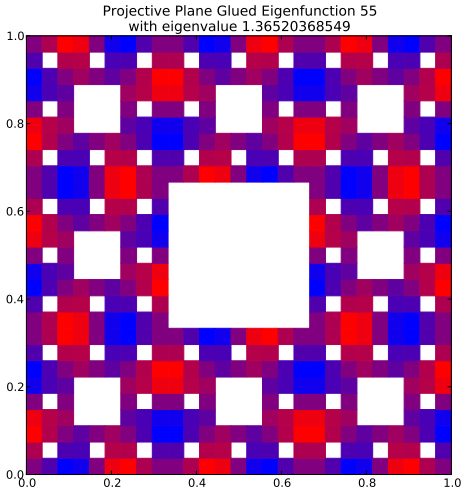


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.208220439966$
Dot Value: 0.08949904161103861

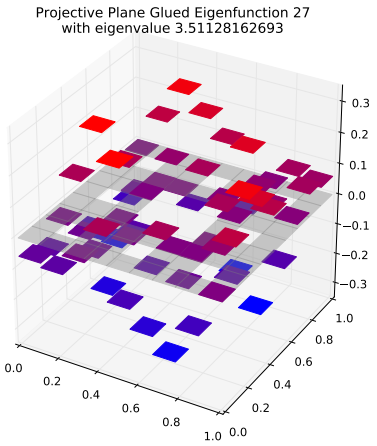
56 $M = 3$ Eigenfunction 55

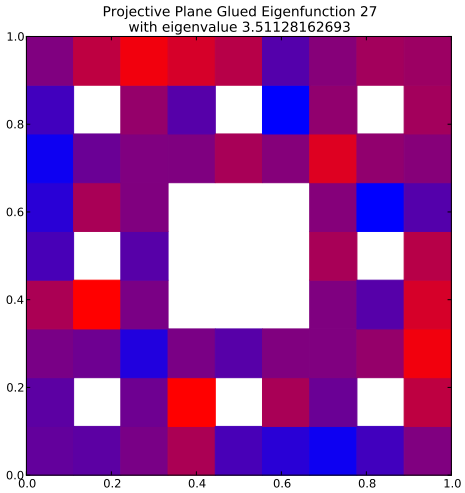
$M = 3$ Eigenfunction 55 has eigenvalue 1.36520368549





Compare to $m = 2$ eigenspace with eigenvalue 3.51128162693
(Note: Eigenspace Dimension > 1)

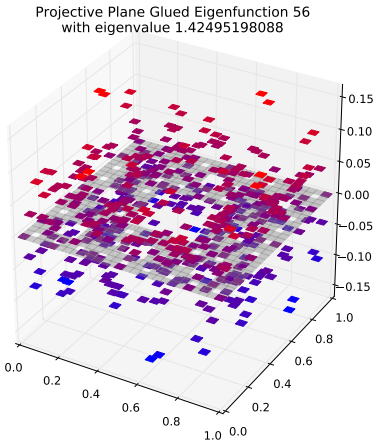


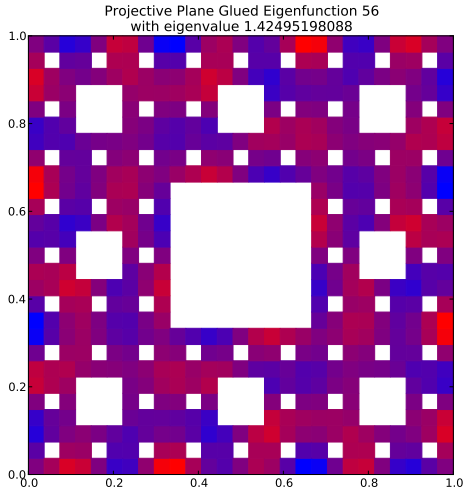


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.388804952305$
Dot Value: 2

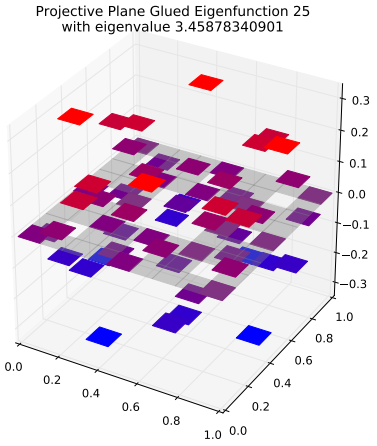
57 $M = 3$ Eigenfunction 56

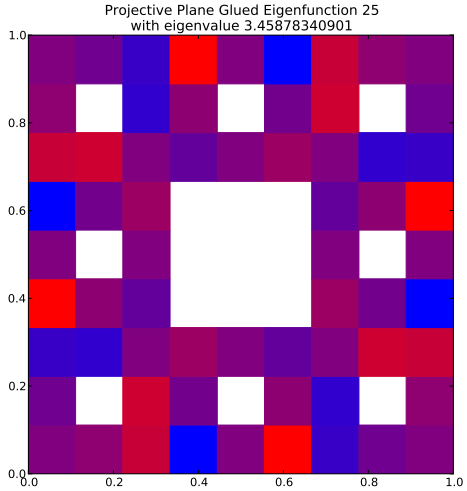
$M = 3$ Eigenfunction 56 has eigenvalue 1.42495198088





Compare to $m = 2$ eigenspace with eigenvalue 3.45878340901

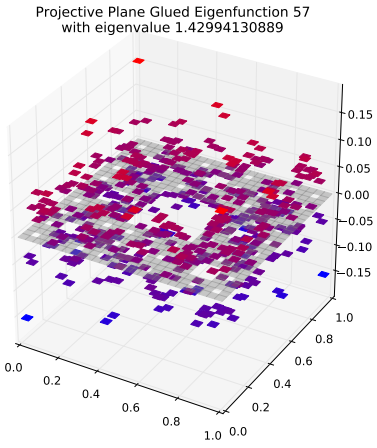


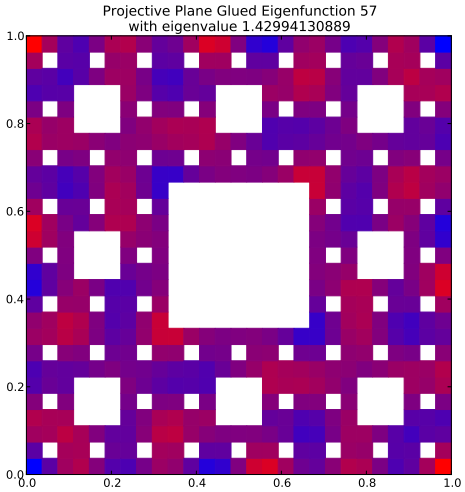


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.411980691584$
Dot Value: 0.40218584221689535

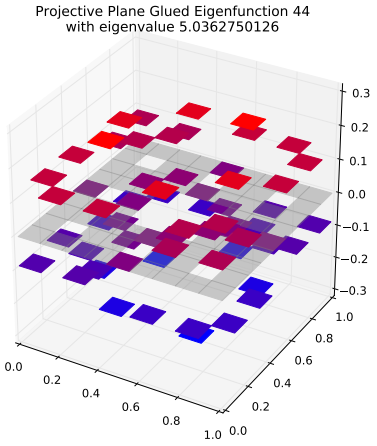
58 $M = 3$ Eigenfunction 57

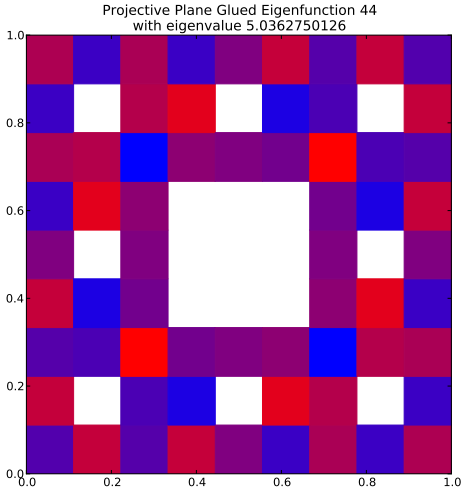
$M = 3$ Eigenfunction 57 has eigenvalue 1.42994130889





Compare to $m = 2$ eigenspace with eigenvalue 5.0362750126

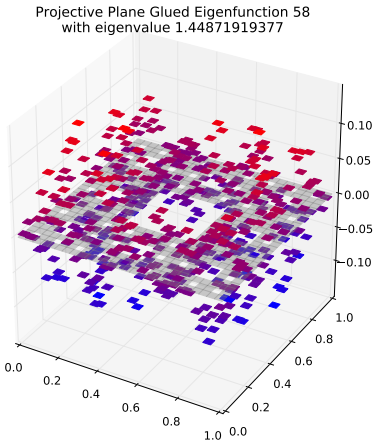


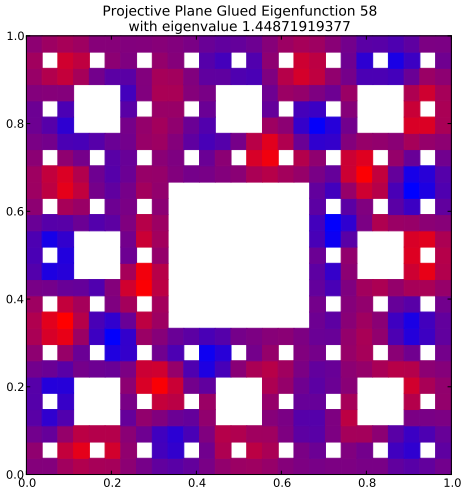


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.283928360804$
Dot Value: 0.38227003632157686

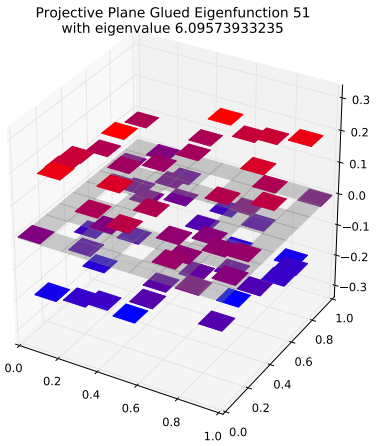
59 $M = 3$ Eigenfunction 58

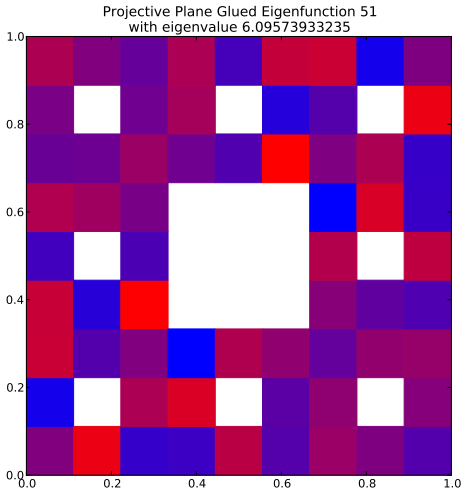
$M = 3$ Eigenfunction 58 has eigenvalue 1.44871919377





Compare to $m = 2$ eigenspace with eigenvalue 6.09573933235
(Note: Eigenspace Dimension > 1)

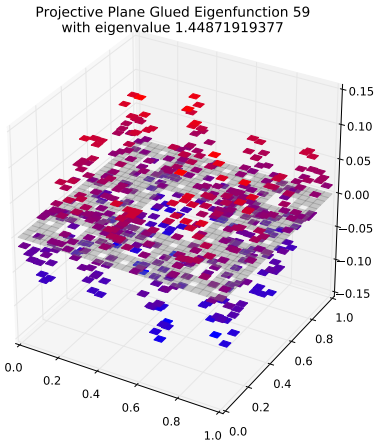


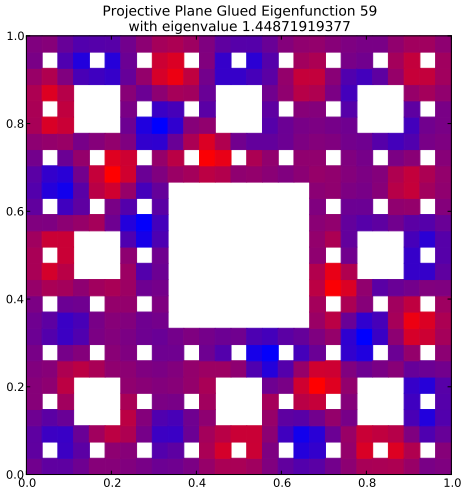


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237660948866$
Dot Value: 0.23651928851896276

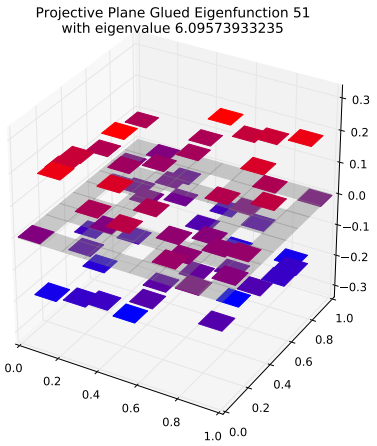
60 $M = 3$ Eigenfunction 59

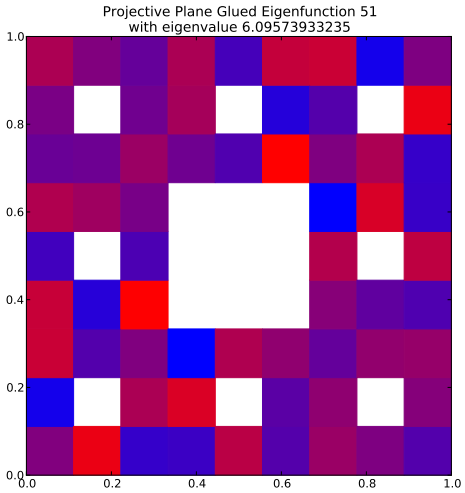
$M = 3$ Eigenfunction 59 has eigenvalue 1.44871919377





Compare to $m = 2$ eigenspace with eigenvalue 6.09573933235
(Note: Eigenspace Dimension > 1)

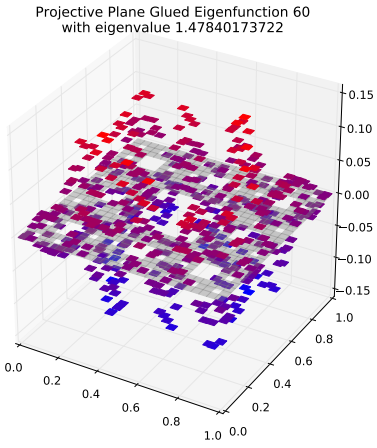


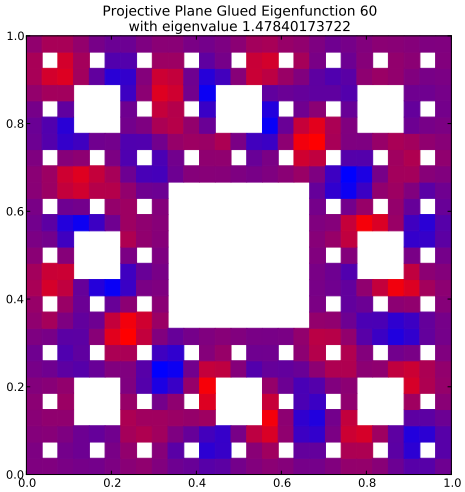


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.237660948866$
Dot Value: 0.23651928851895532

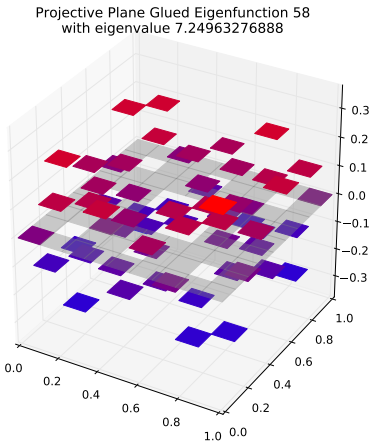
61 $M = 3$ Eigenfunction 60

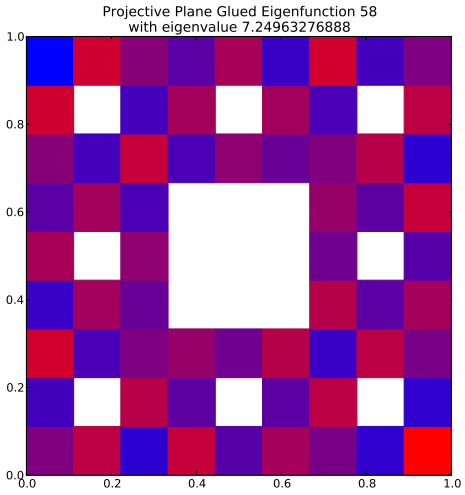
$M = 3$ Eigenfunction 60 has eigenvalue 1.47840173722





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

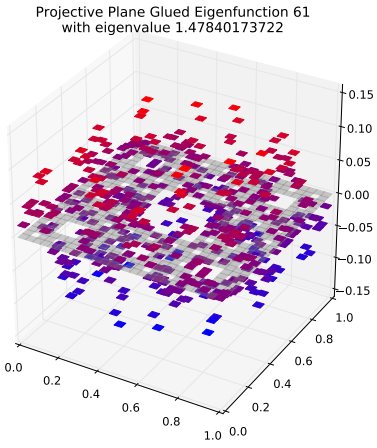


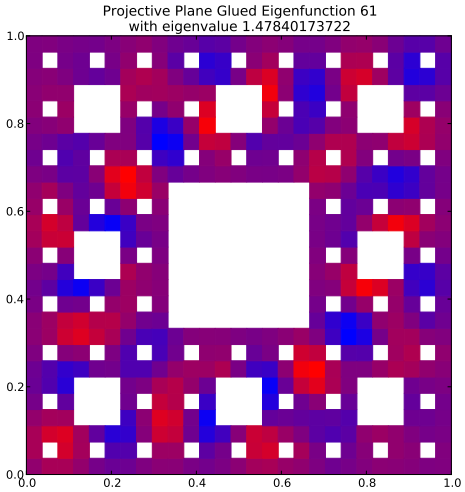


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.203927810463$
Dot Value: 0.24629670924209435

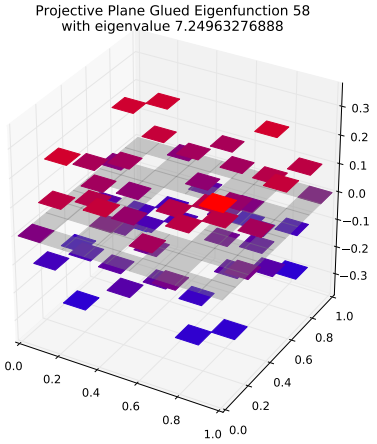
62 $M = 3$ Eigenfunction 61

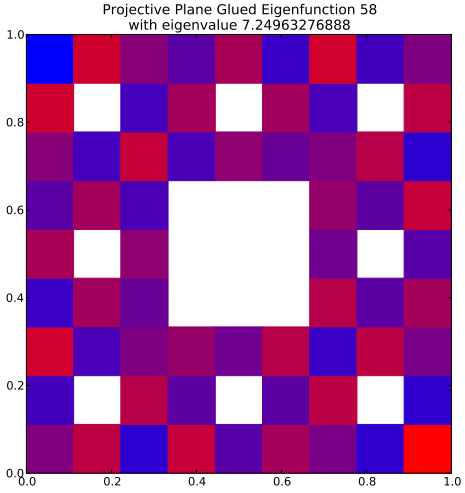
$M = 3$ Eigenfunction 61 has eigenvalue 1.47840173722





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

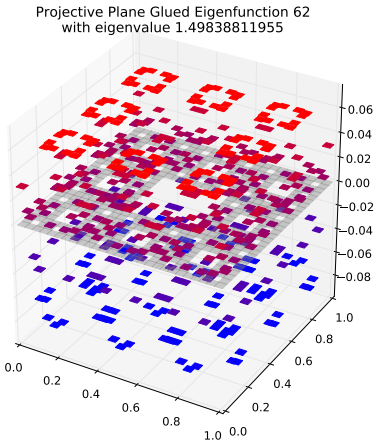


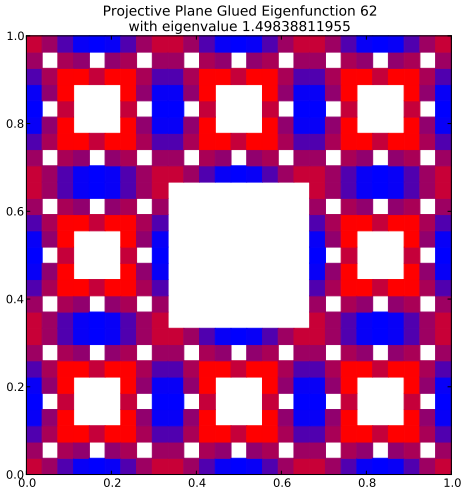


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.203927810463$
Dot Value: 0.24629670924209135

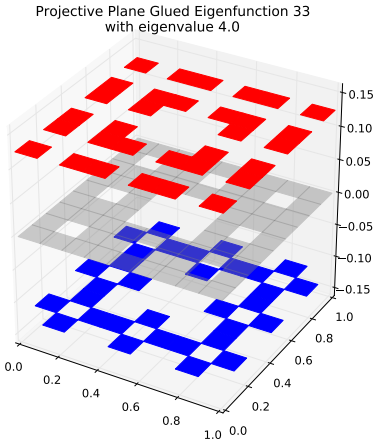
63 $M = 3$ Eigenfunction 62

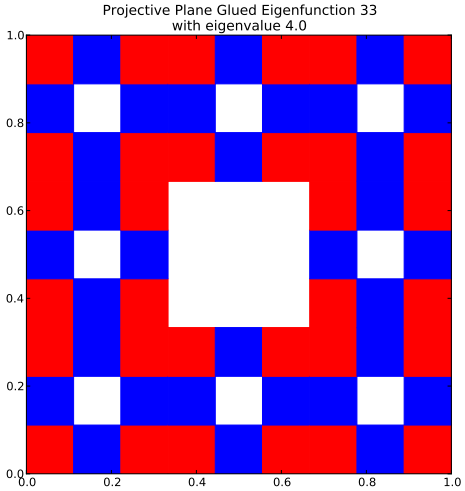
$M = 3$ Eigenfunction 62 has eigenvalue 1.49838811955





Compare to $m = 2$ eigenspace with eigenvalue 4.0

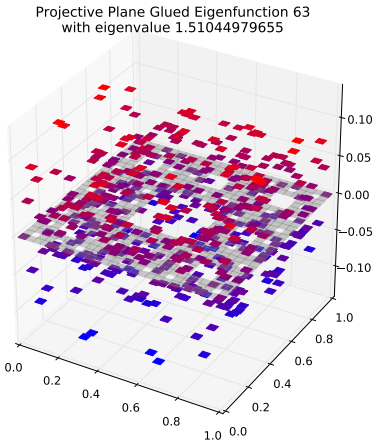


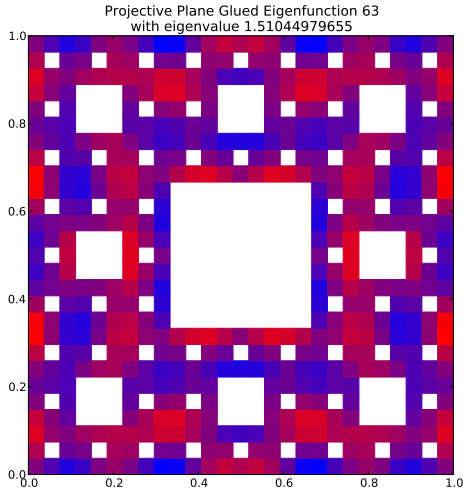


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.374597029888$
Dot Value: 2.220446049250313e-16

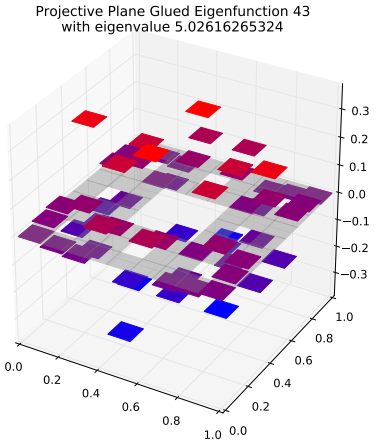
64 $M = 3$ Eigenfunction 63

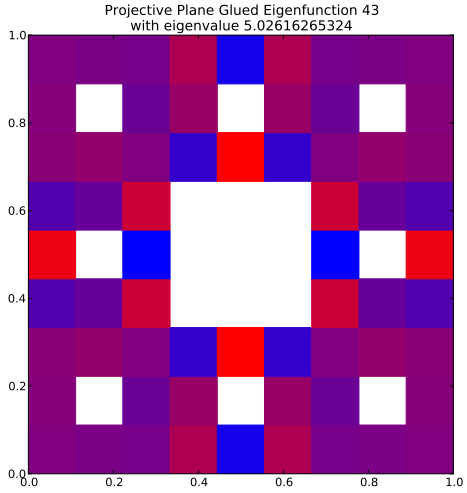
$M = 3$ Eigenfunction 63 has eigenvalue 1.51044979655





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

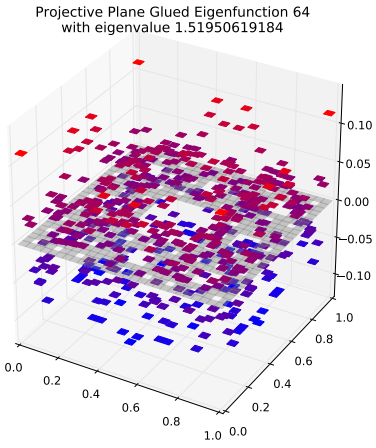


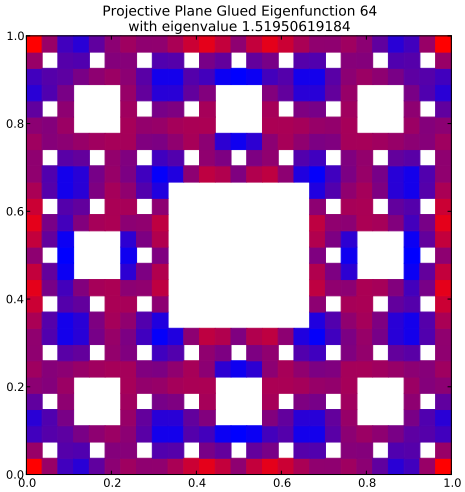


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.300517492321$
Dot Value: 0.36554596070839407

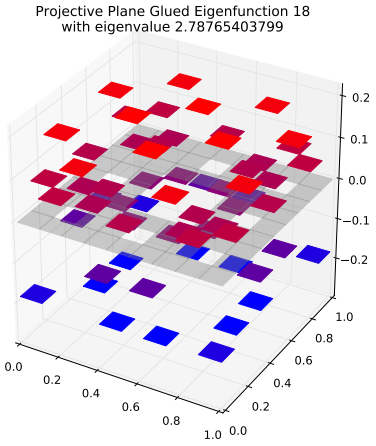
65 $M = 3$ Eigenfunction 64

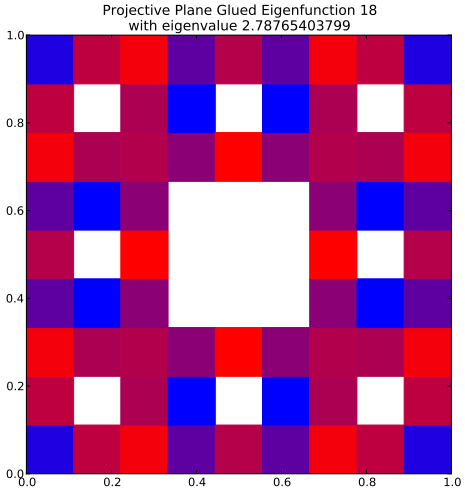
$M = 3$ Eigenfunction 64 has eigenvalue 1.51950619184





Compare to $m = 2$ eigenspace with eigenvalue 2.78765403799

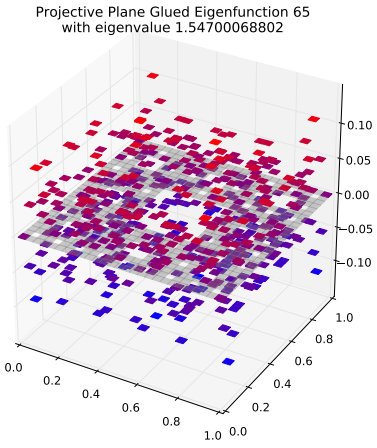


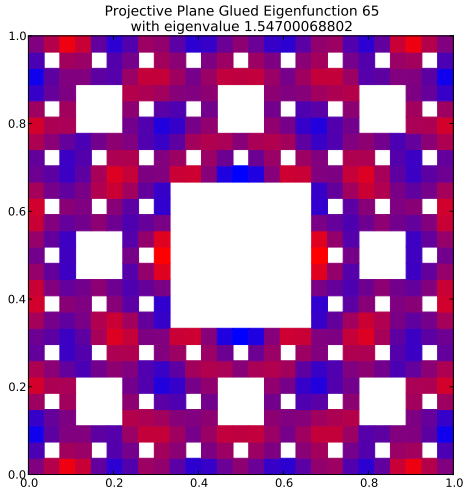


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.545084207415$
Dot Value: 0.4059355012585302

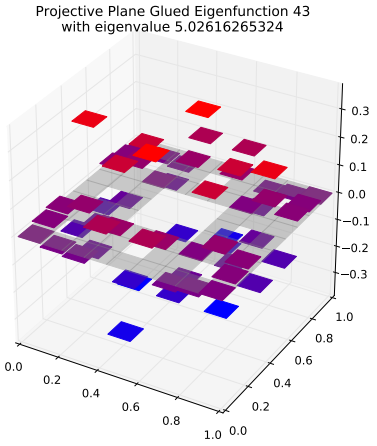
66 $M = 3$ Eigenfunction 65

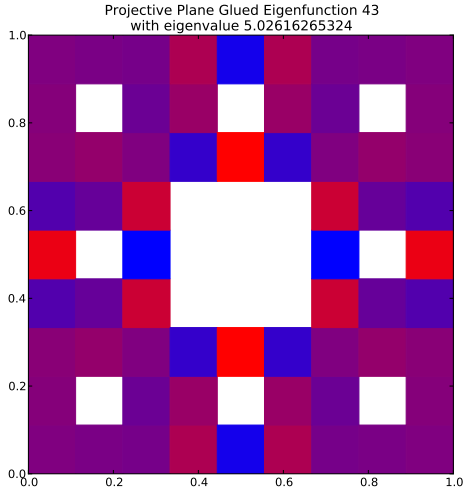
$M = 3$ Eigenfunction 65 has eigenvalue 1.54700068802





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

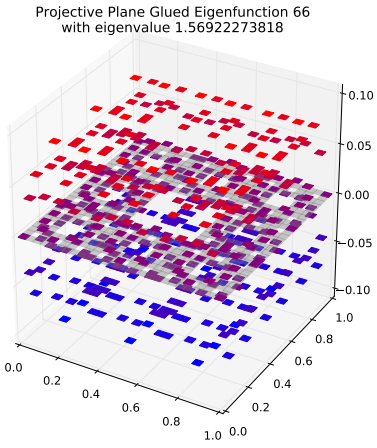


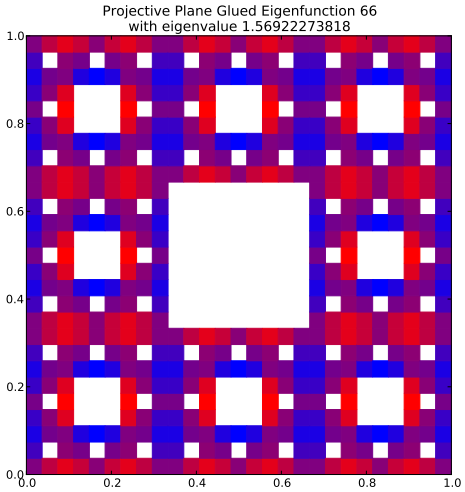


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.30778961899$
Dot Value: 0.17716550190725022

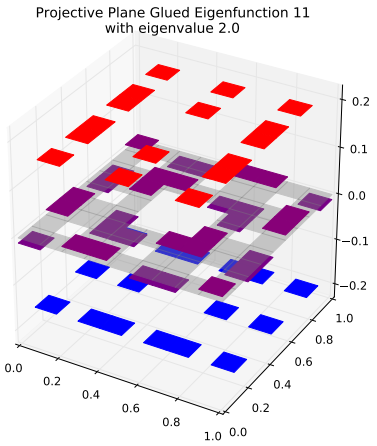
67 $M = 3$ Eigenfunction 66

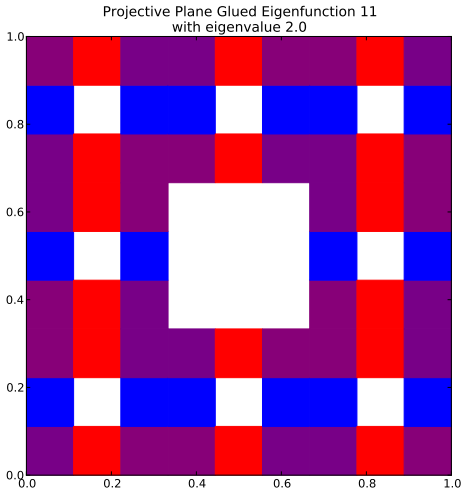
$M = 3$ Eigenfunction 66 has eigenvalue 1.56922273818





Compare to $m = 2$ eigenspace with eigenvalue 2.0
(Note: Eigenspace Dimension > 1)

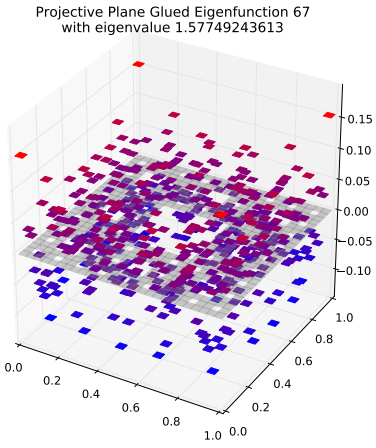


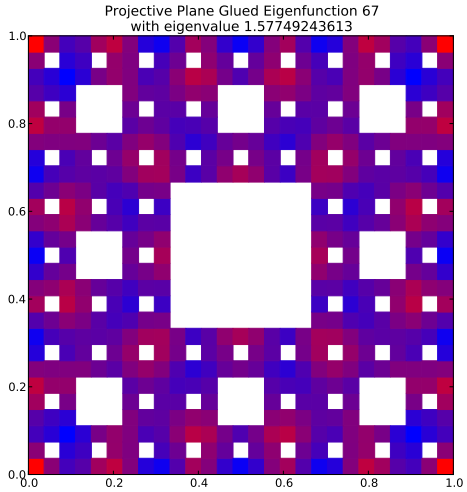


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.78461136909$
Dot Value: 1.1102230246251565e-16

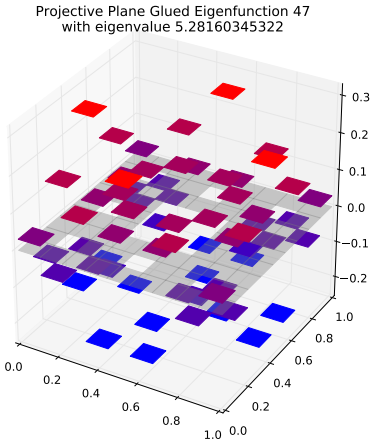
68 $M = 3$ Eigenfunction 67

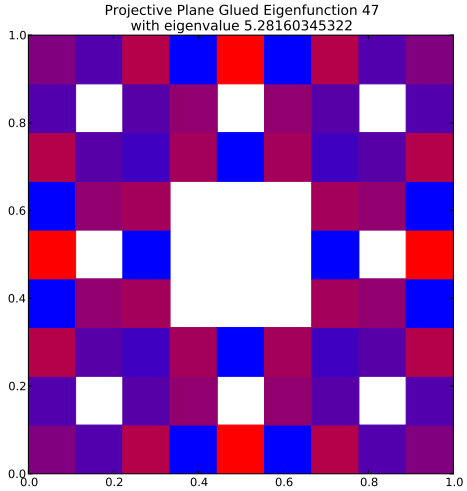
$M = 3$ Eigenfunction 67 has eigenvalue 1.57749243613





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

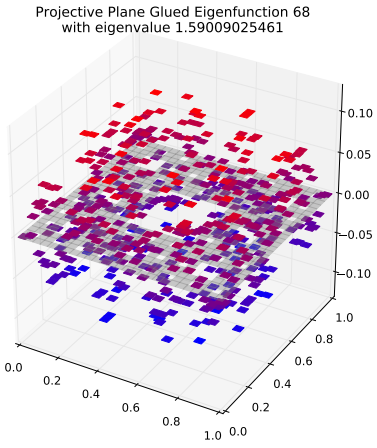


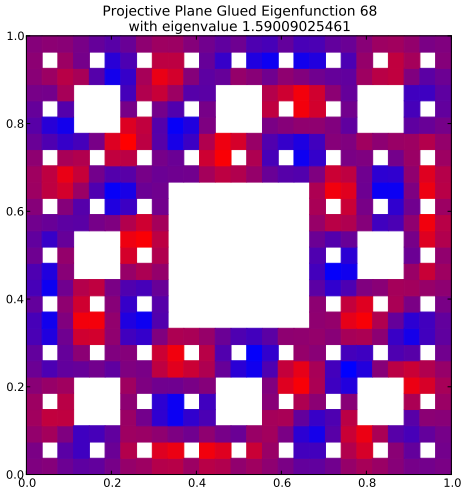


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.298676803381$
Dot Value: 0.10969442174125965

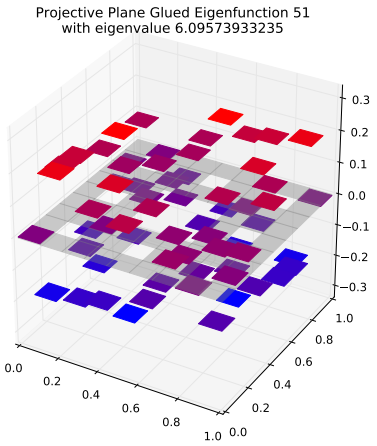
69 $M = 3$ Eigenfunction 68

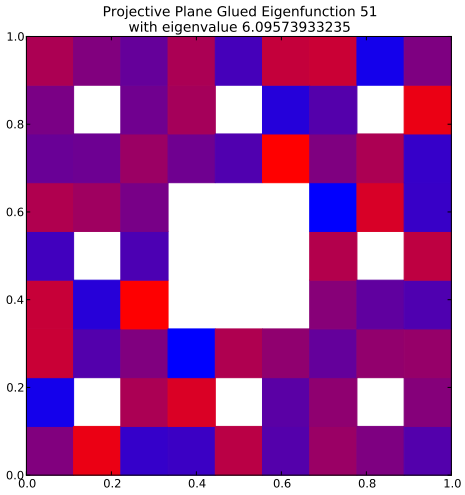
$M = 3$ Eigenfunction 68 has eigenvalue 1.59009025461





Compare to $m = 2$ eigenspace with eigenvalue 6.09573933235
(Note: Eigenspace Dimension > 1)

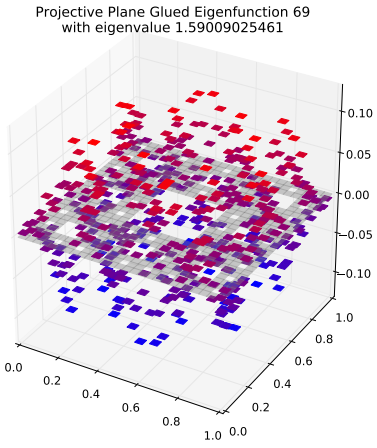


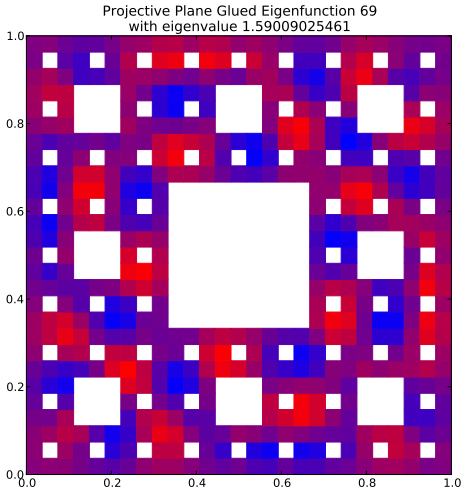


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.260852731378$
Dot Value: 0.28669511702143546

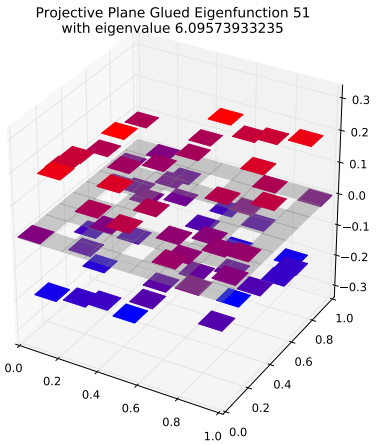
70 $M = 3$ Eigenfunction 69

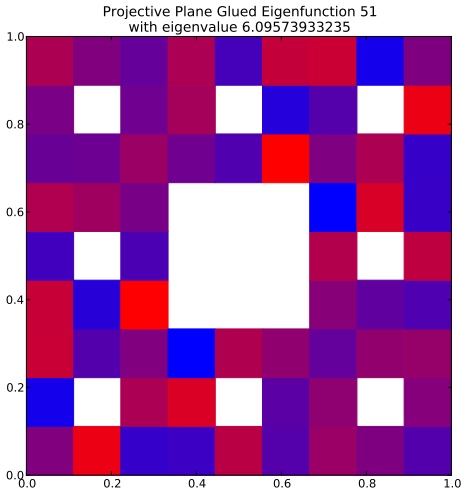
$M = 3$ Eigenfunction 69 has eigenvalue 1.59009025461





Compare to $m = 2$ eigenspace with eigenvalue 6.09573933235
(Note: Eigenspace Dimension > 1)

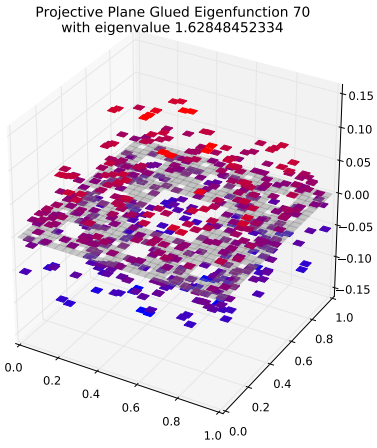


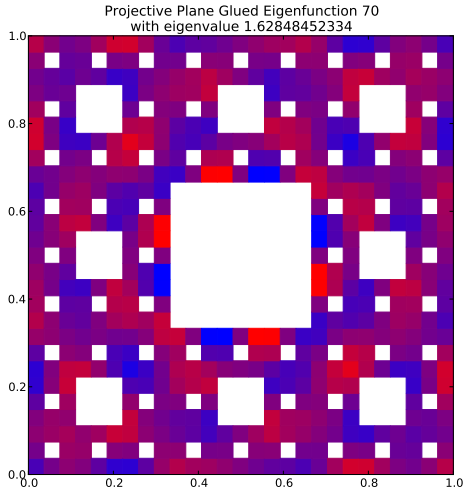


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.260852731378$
Dot Value: 0.2866951170214319

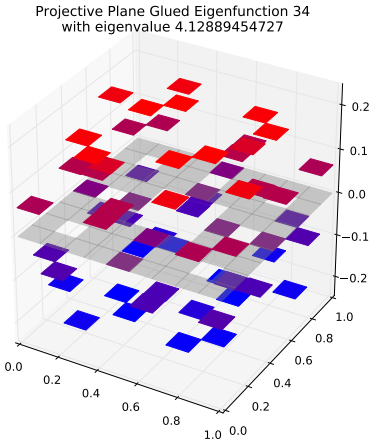
71 $M = 3$ Eigenfunction 70

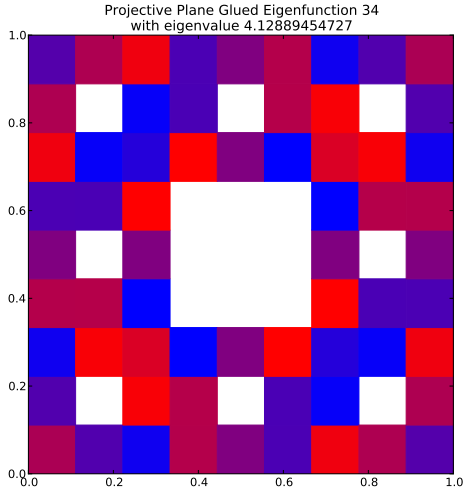
$M = 3$ Eigenfunction 70 has eigenvalue 1.62848452334





Compare to $m = 2$ eigenspace with eigenvalue 4.12889454727

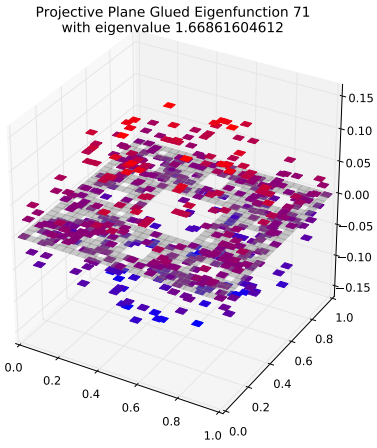


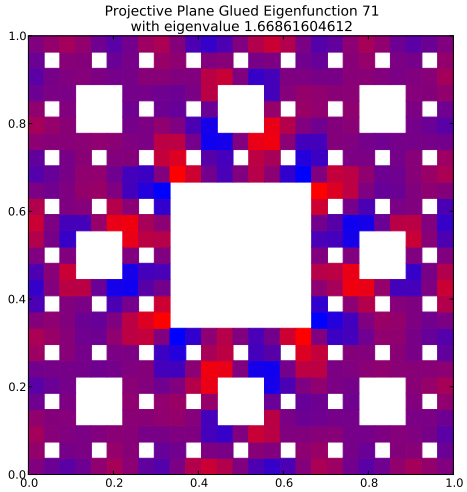


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.394411749851$
Dot Value: 0.4563569234466117

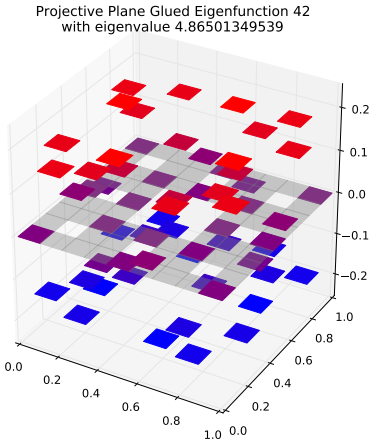
72 $M = 3$ Eigenfunction 71

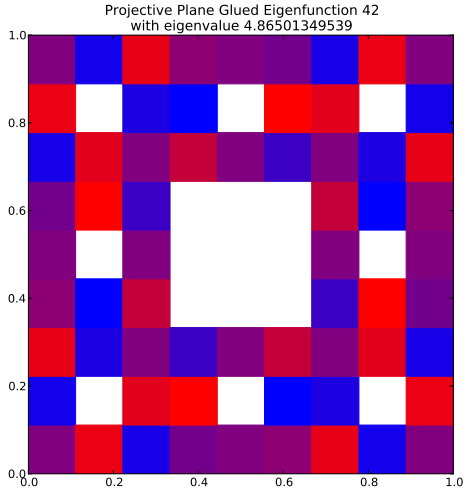
$M = 3$ Eigenfunction 71 has eigenvalue 1.66861604612





Compare to $m = 2$ eigenspace with eigenvalue 4.86501349539

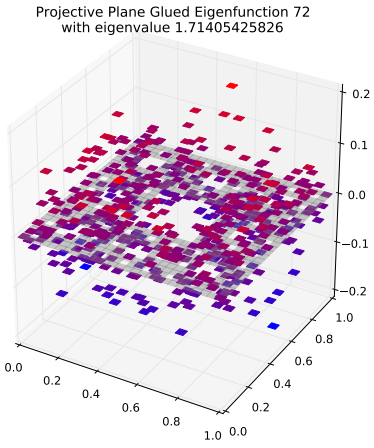


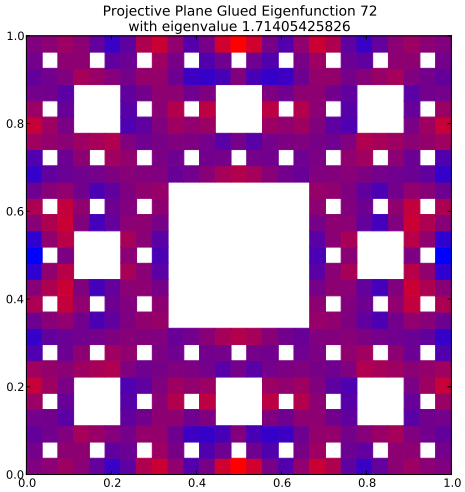


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.342982819617$
Dot Value: 0.14996624711657192

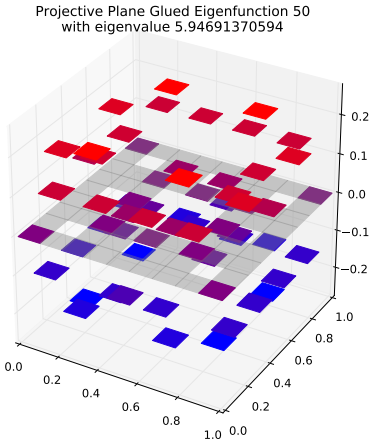
73 $M = 3$ Eigenfunction 72

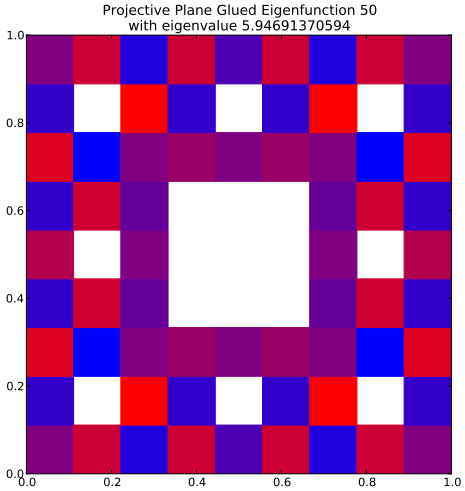
$M = 3$ Eigenfunction 72 has eigenvalue 1.71405425826





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

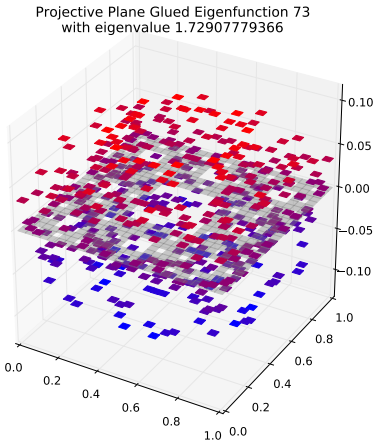


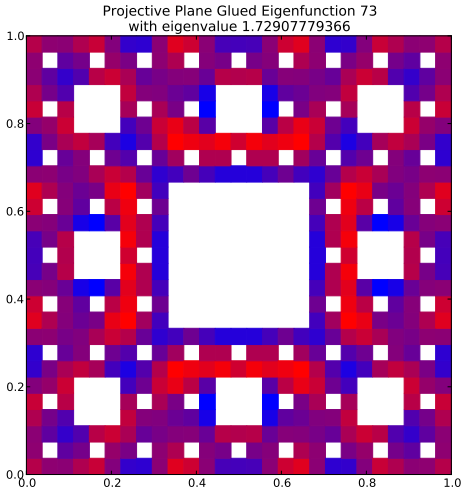


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.288225850083$
Dot Value: 0.12400492594907986

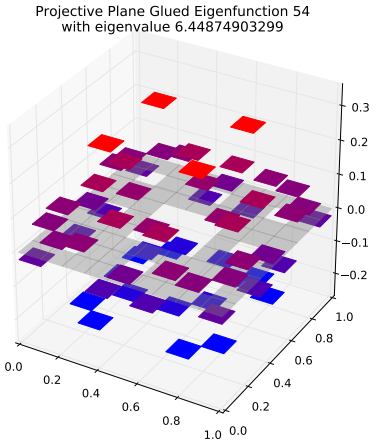
74 $M = 3$ Eigenfunction 73

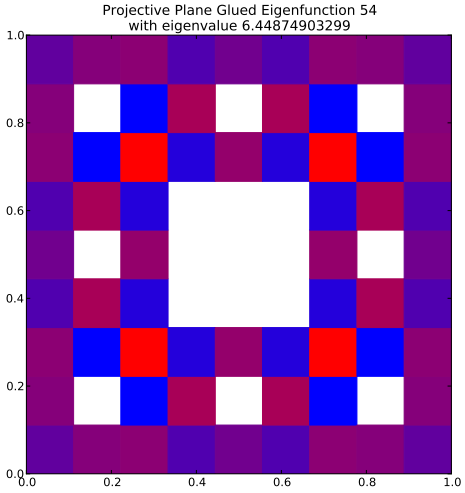
$M = 3$ Eigenfunction 73 has eigenvalue 1.72907779366





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

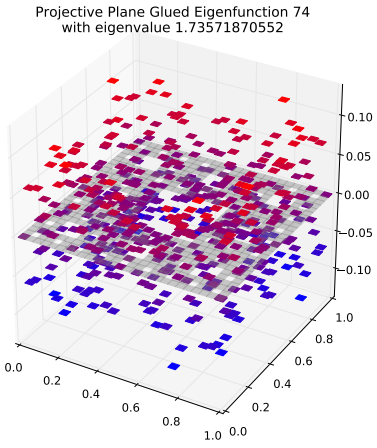


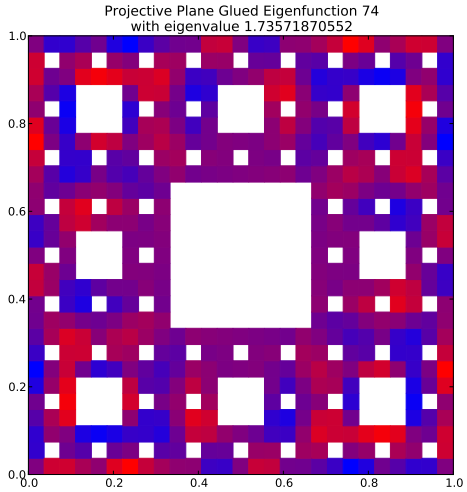


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.268126079153$
Dot Value: 0.30894529212355704

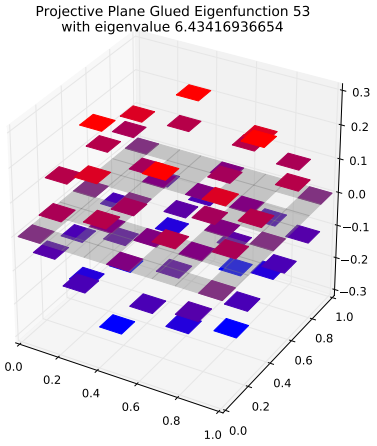
75 $M = 3$ Eigenfunction 74

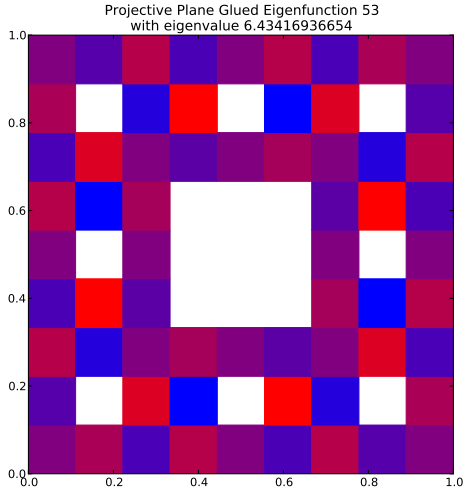
$M = 3$ Eigenfunction 74 has eigenvalue 1.73571870552





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

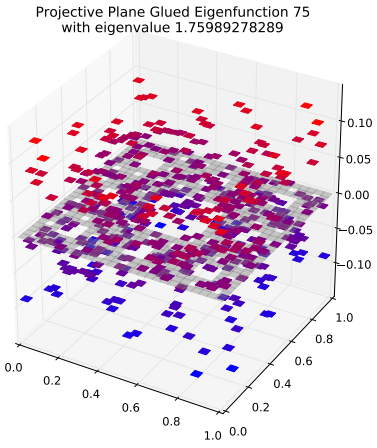


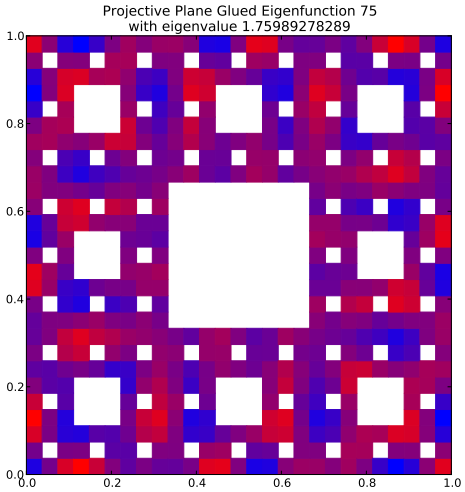


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.26976577809$
Dot Value: 0.2571849976203482

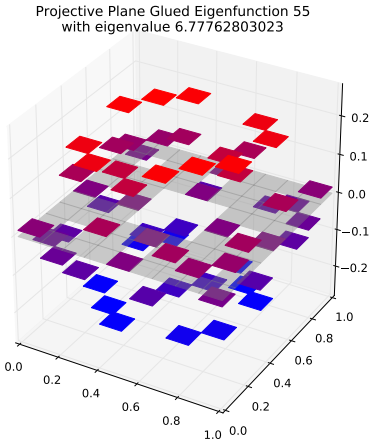
76 $M = 3$ Eigenfunction 75

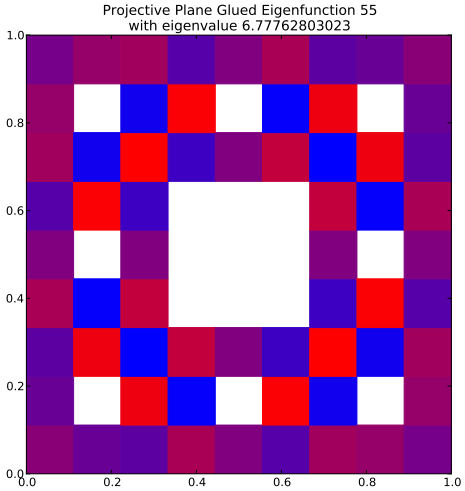
$M = 3$ Eigenfunction 75 has eigenvalue 1.75989278289





Compare to $m = 2$ eigenspace with eigenvalue 6.77762803023

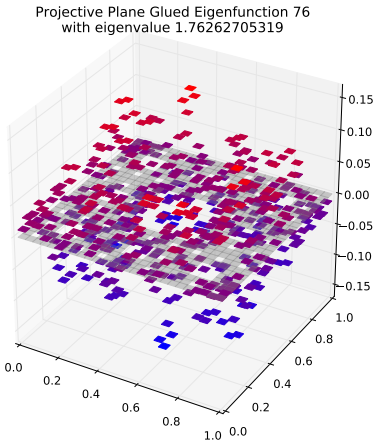


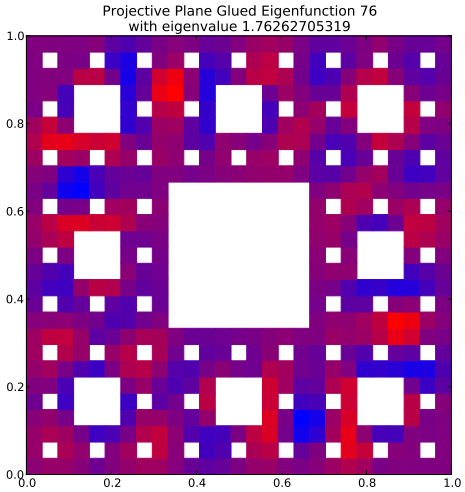


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.259662049176$
Dot Value: 0.35179929573462276

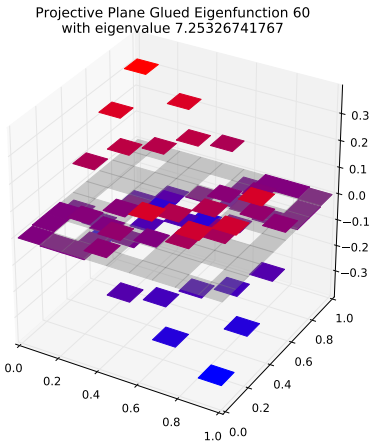
77 $M = 3$ Eigenfunction 76

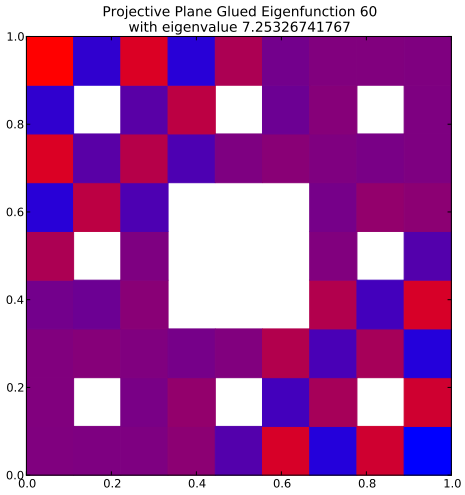
$M = 3$ Eigenfunction 76 has eigenvalue 1.76262705319





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

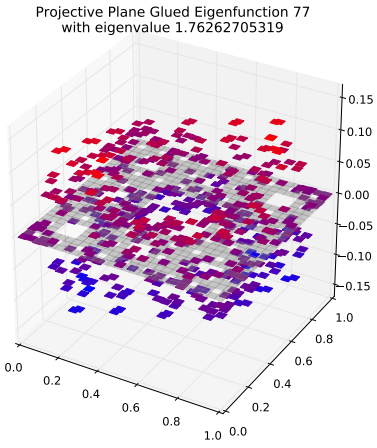


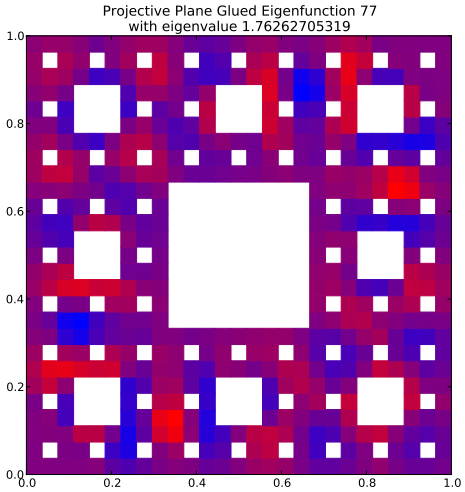


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.243011452865$
Dot Value: 0.25481977542280865

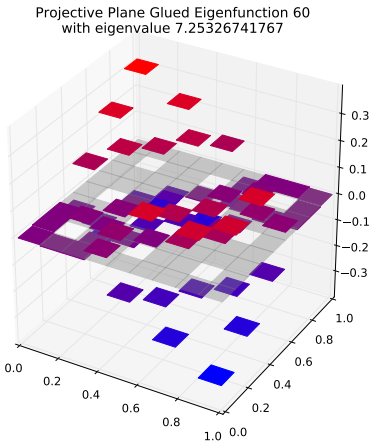
78 $M = 3$ Eigenfunction 77

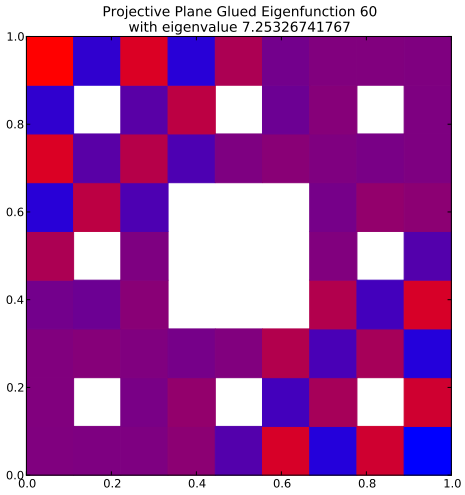
$M = 3$ Eigenfunction 77 has eigenvalue 1.76262705319





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

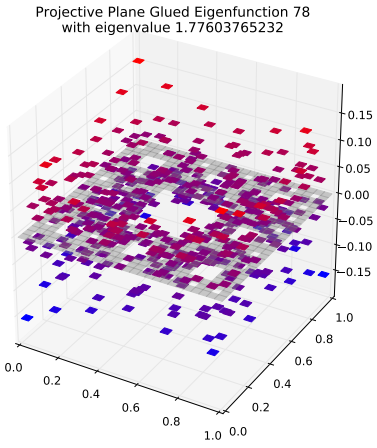


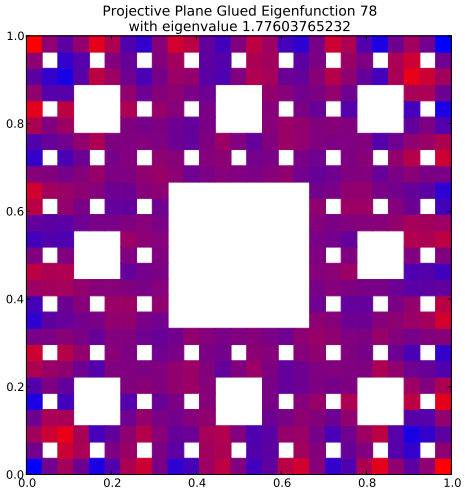


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.243011452865$
Dot Value: 0.254819775422926

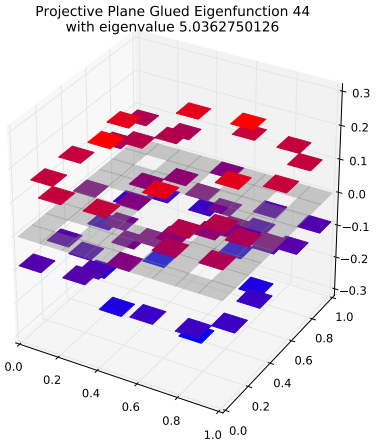
79 $M = 3$ Eigenfunction 78

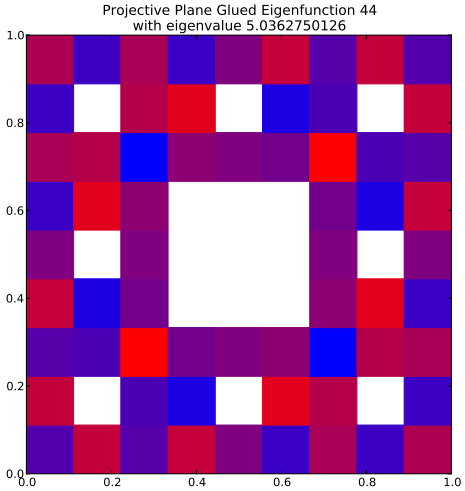
$M = 3$ Eigenfunction 78 has eigenvalue 1.77603765232





Compare to $m = 2$ eigenspace with eigenvalue 5.0362750126

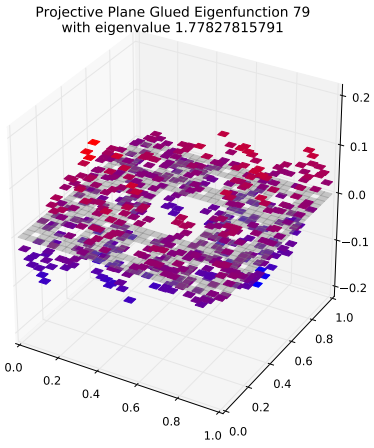


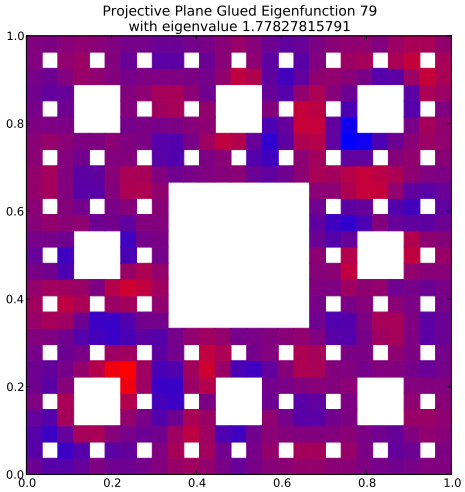


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.352649060639$
Dot Value: 0.34341394116269497

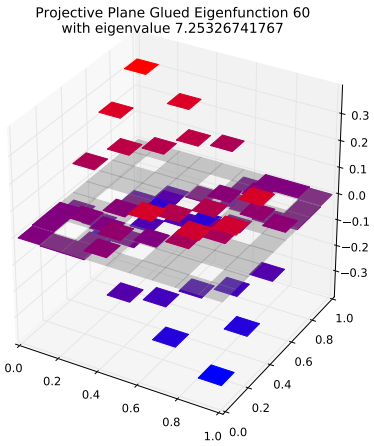
80 $M = 3$ Eigenfunction 79

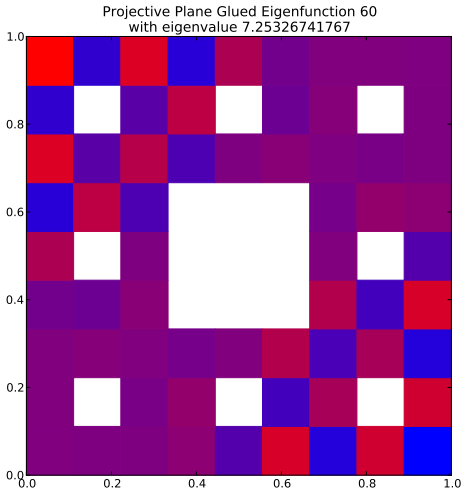
$M = 3$ Eigenfunction 79 has eigenvalue 1.77827815791





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

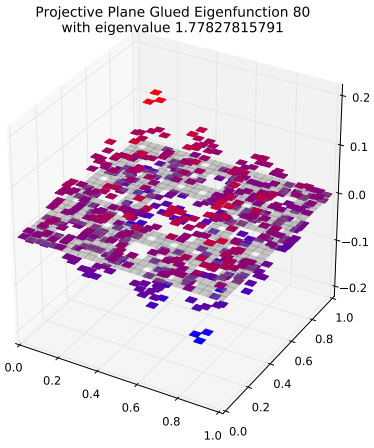


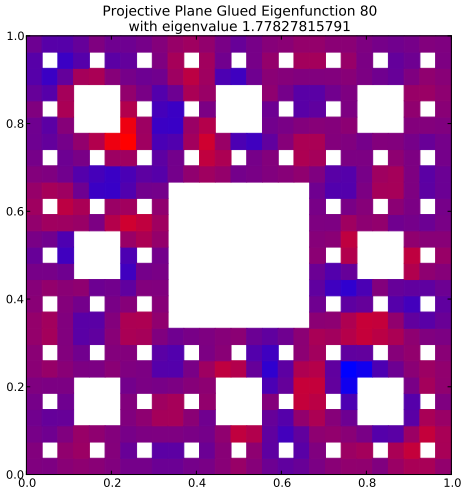


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.245169253456$
Dot Value: 0.3491229521143736

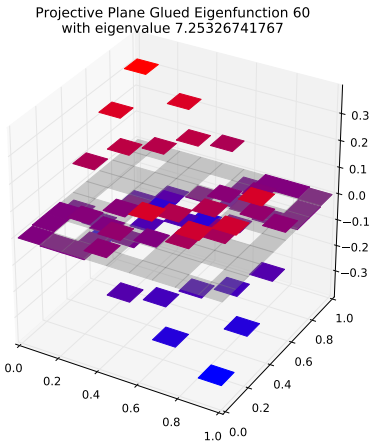
81 $M = 3$ Eigenfunction 80

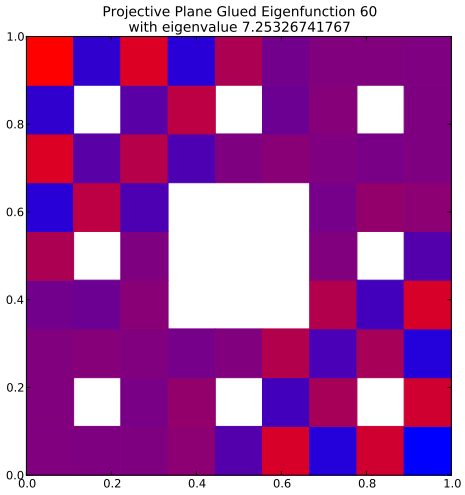
$M = 3$ Eigenfunction 80 has eigenvalue 1.77827815791





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

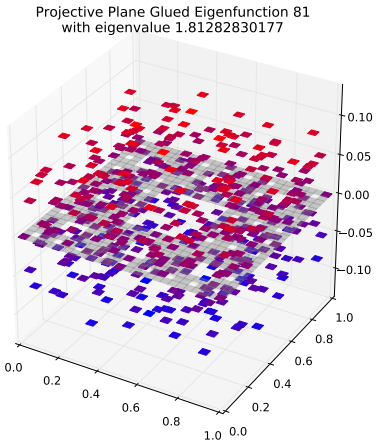


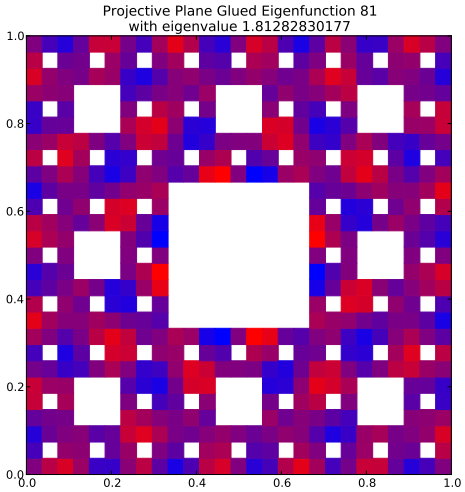


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.245169253456$
Dot Value: 0.34912295211437216

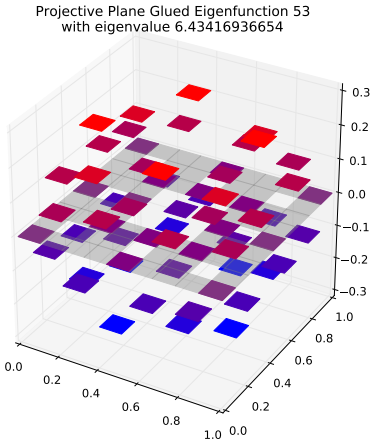
82 $M = 3$ Eigenfunction 81

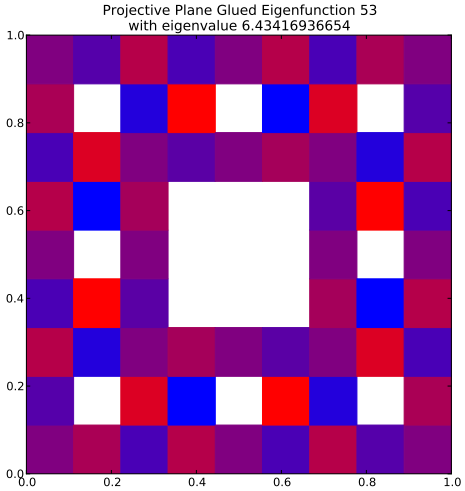
$M = 3$ Eigenfunction 81 has eigenvalue 1.81282830177





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

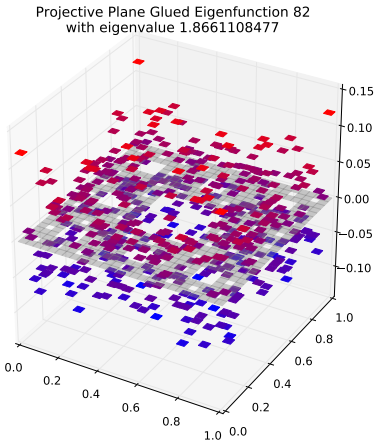


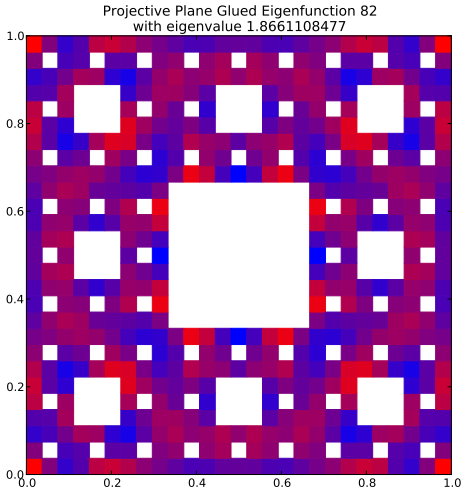


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.281750168281$
Dot Value: 0.30410155906748726

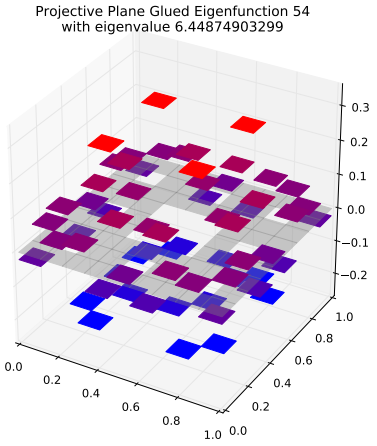
83 $M = 3$ Eigenfunction 82

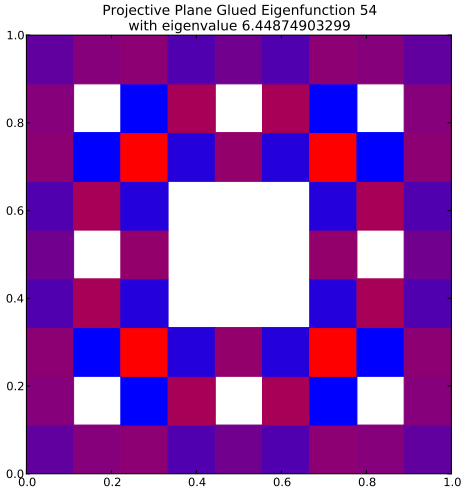
$M = 3$ Eigenfunction 82 has eigenvalue 1.8661108477





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

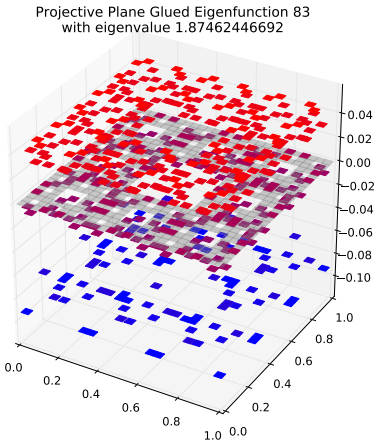


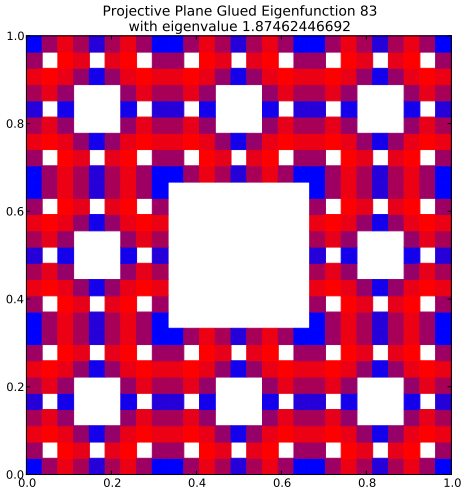


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.289375635205$
Dot Value: 0.1690069008156737

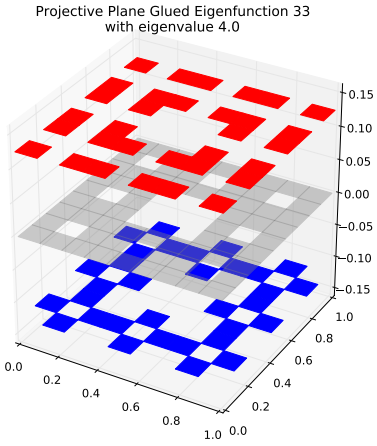
84 $M = 3$ Eigenfunction 83

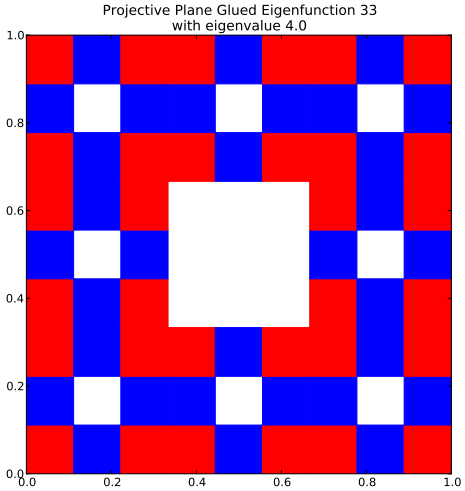
$M = 3$ Eigenfunction 83 has eigenvalue 1.87462446692





Compare to $m = 2$ eigenspace with eigenvalue 4.0

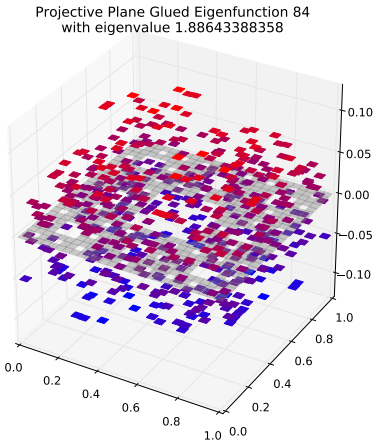


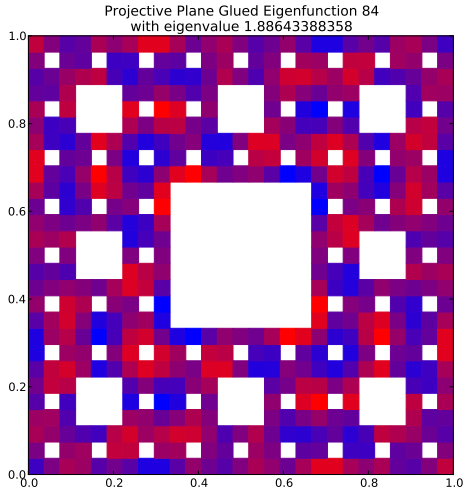


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.468656116731$
Dot Value: 0.0

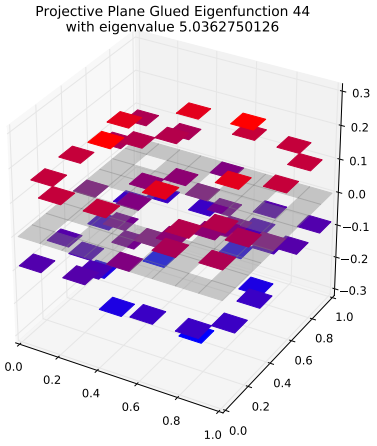
85 $M = 3$ Eigenfunction 84

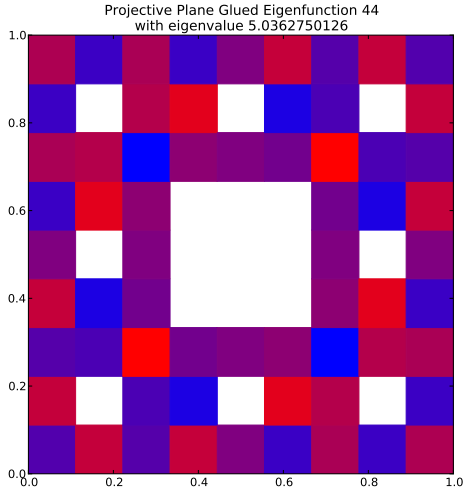
$M = 3$ Eigenfunction 84 has eigenvalue 1.88643388358





Compare to $m = 2$ eigenspace with eigenvalue 5.0362750126

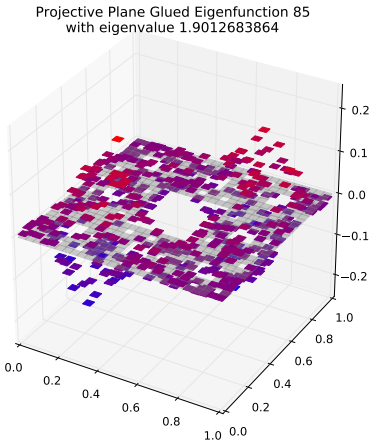


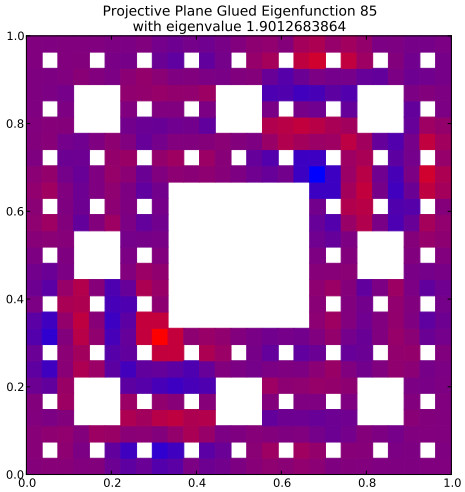


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.374569275676$
Dot Value: 0.27648904303214206

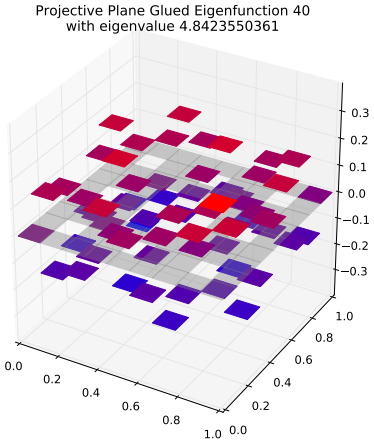
86 $M = 3$ Eigenfunction 85

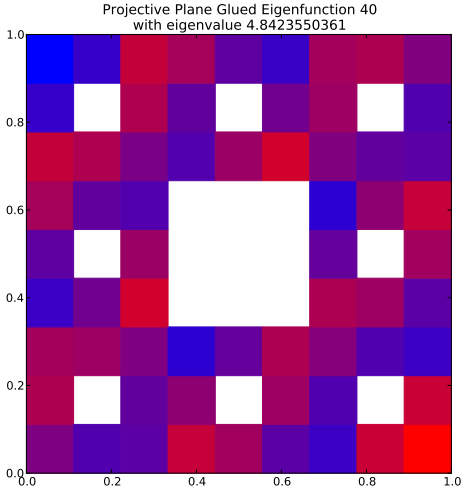
$M = 3$ Eigenfunction 85 has eigenvalue 1.9012683864





Compare to $m = 2$ eigenspace with eigenvalue 4.8423550361
(Note: Eigenspace Dimension > 1)

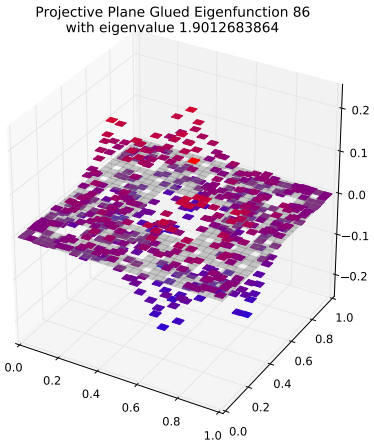


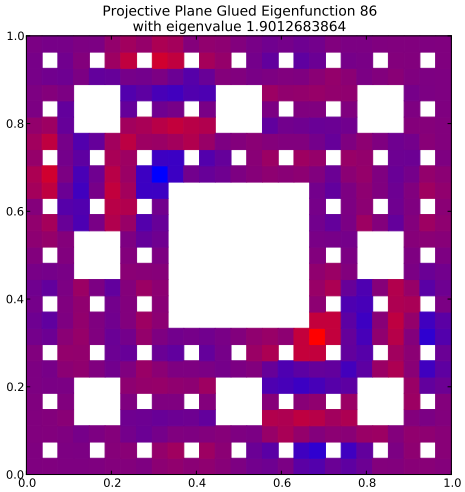


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.392633000313$
Dot Value: 0.3481892886969452

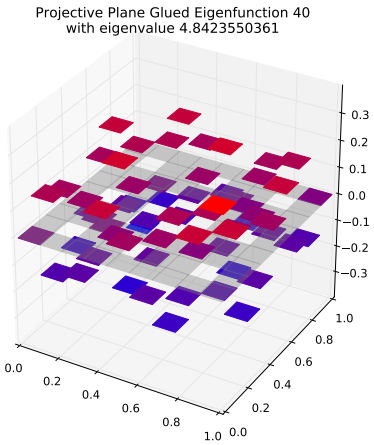
87 $M = 3$ Eigenfunction 86

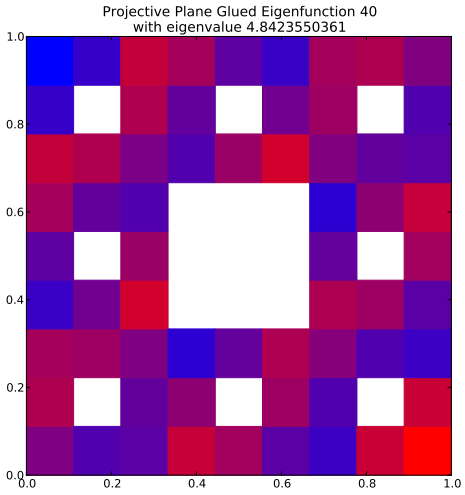
$M = 3$ Eigenfunction 86 has eigenvalue 1.9012683864





Compare to $m = 2$ eigenspace with eigenvalue 4.8423550361
(Note: Eigenspace Dimension > 1)

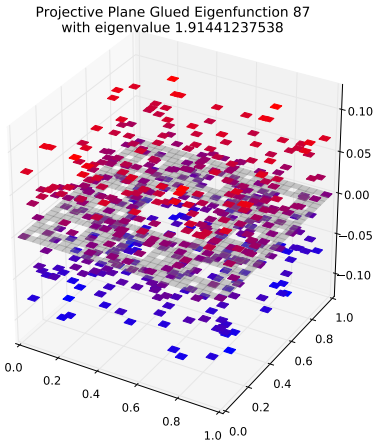


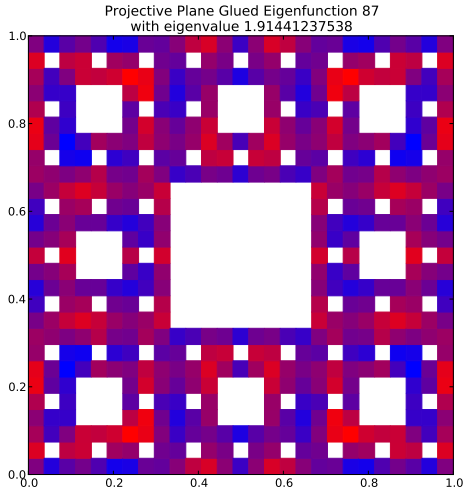


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.392633000313$
Dot Value: 0.34818928869694077

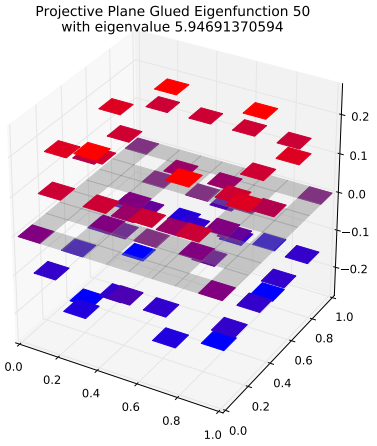
88 $M = 3$ Eigenfunction 87

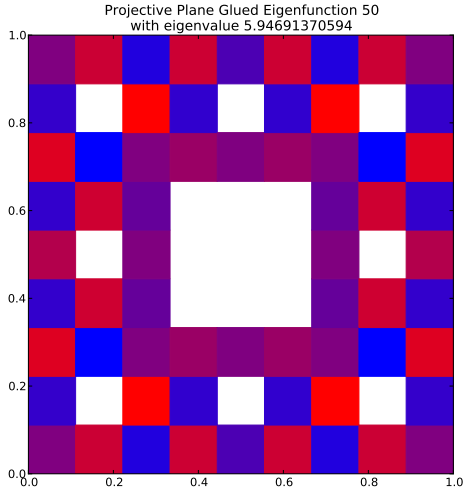
$M = 3$ Eigenfunction 87 has eigenvalue 1.91441237538





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

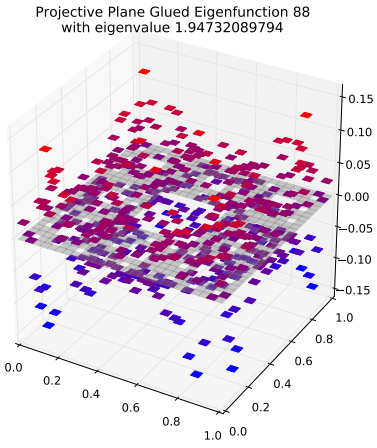


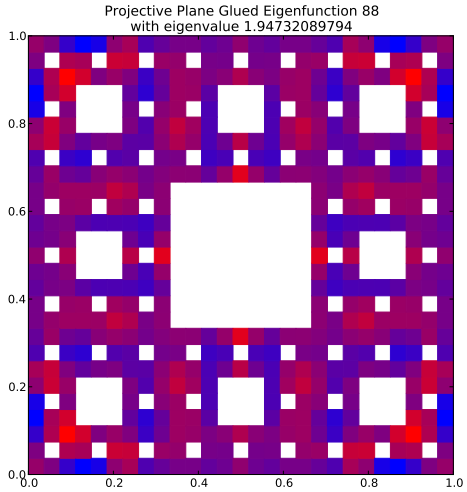


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.321916958955$
Dot Value: 0.38970843263391786

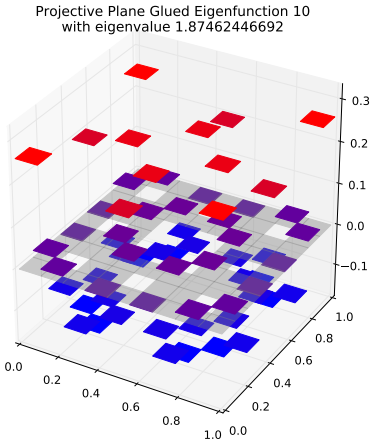
89 $M = 3$ Eigenfunction 88

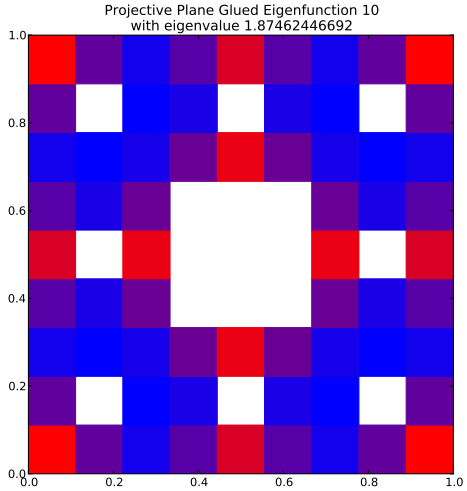
$M = 3$ Eigenfunction 88 has eigenvalue 1.94732089794





Compare to $m = 2$ eigenspace with eigenvalue 1.87462446692

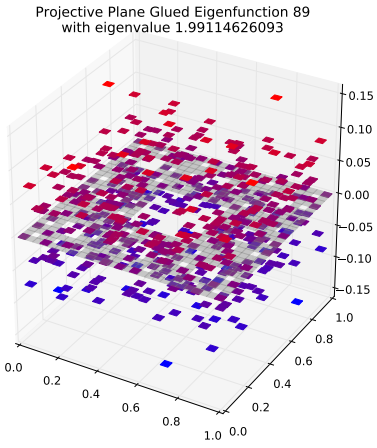


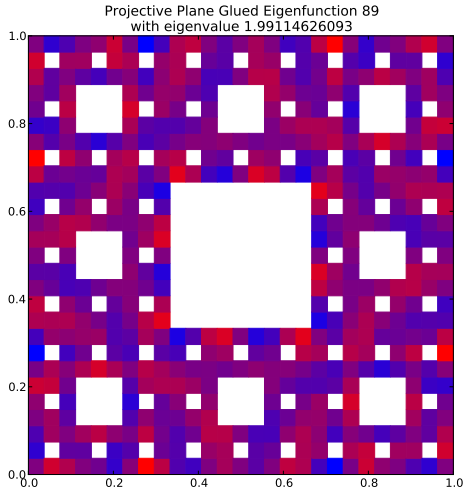


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.03877919674$
Dot Value: 0.3748323788862906

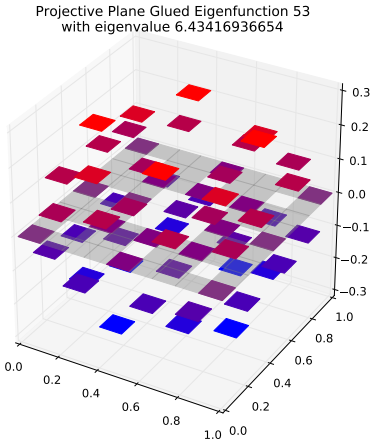
90 $M = 3$ Eigenfunction 89

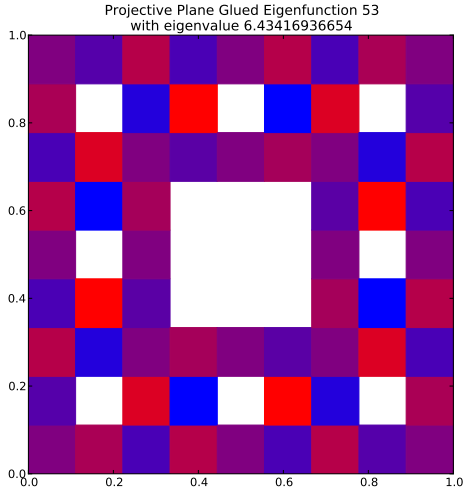
$M = 3$ Eigenfunction 89 has eigenvalue 1.99114626093





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

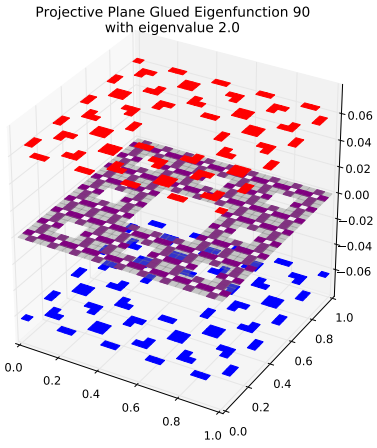


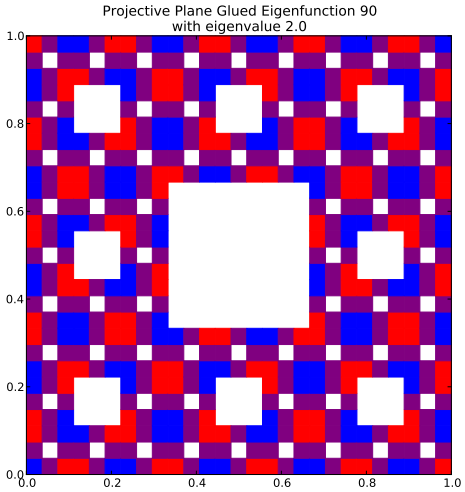


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.309464384212$
Dot Value: 0.08920561505468683

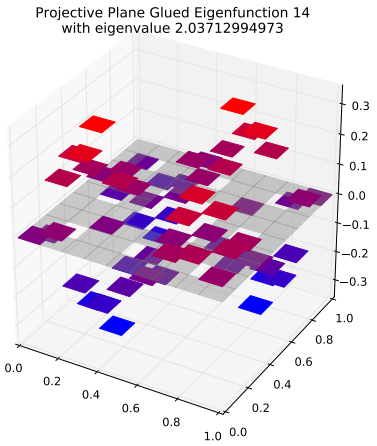
91 $M = 3$ Eigenfunction 90

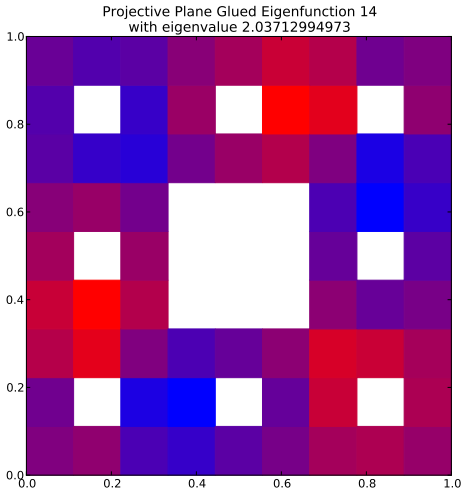
$M = 3$ Eigenfunction 90 has eigenvalue 2.0





Compare to $m = 2$ eigenspace with eigenvalue 2.03712994973
(Note: Eigenspace Dimension > 1)

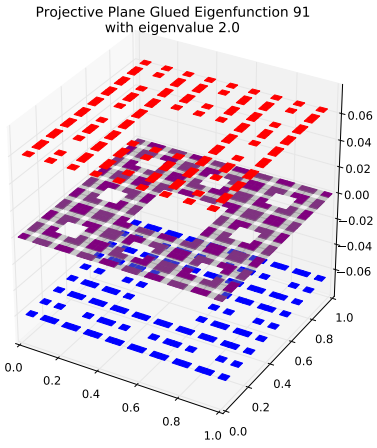


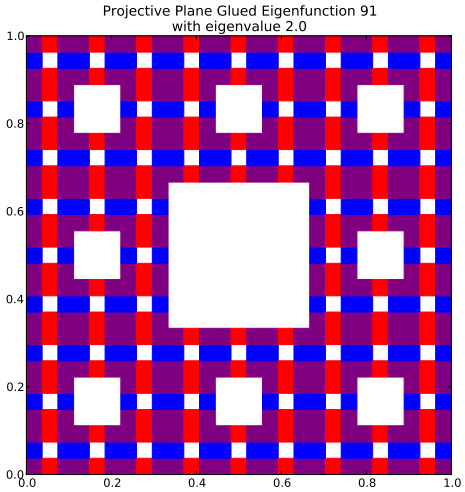


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.981773401477$
Dot Value: 2

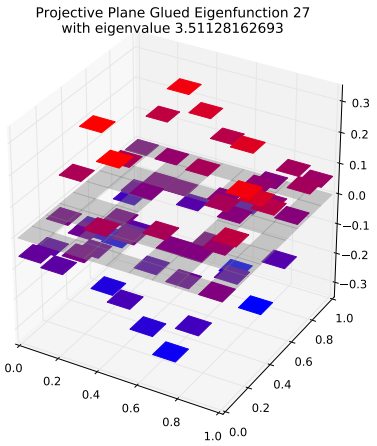
92 $M = 3$ Eigenfunction 91

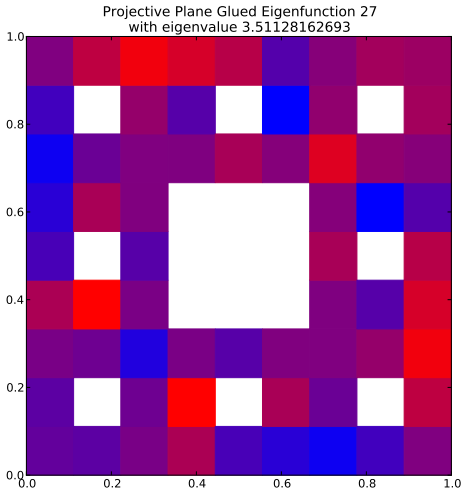
$M = 3$ Eigenfunction 91 has eigenvalue 2.0





Compare to $m = 2$ eigenspace with eigenvalue 3.51128162693
(Note: Eigenspace Dimension > 1)

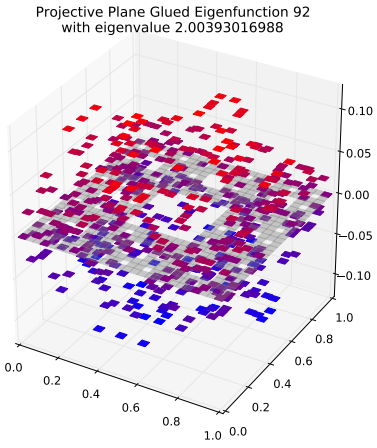


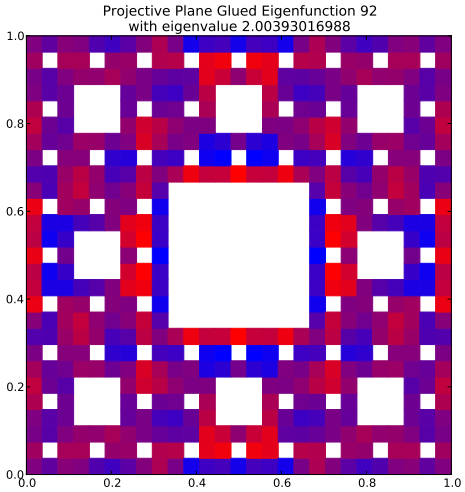


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.56959259111$
Dot Value: 2

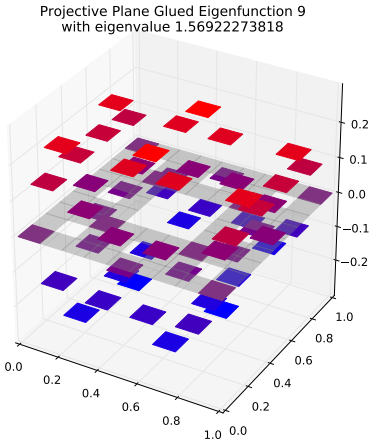
93 $M = 3$ Eigenfunction 92

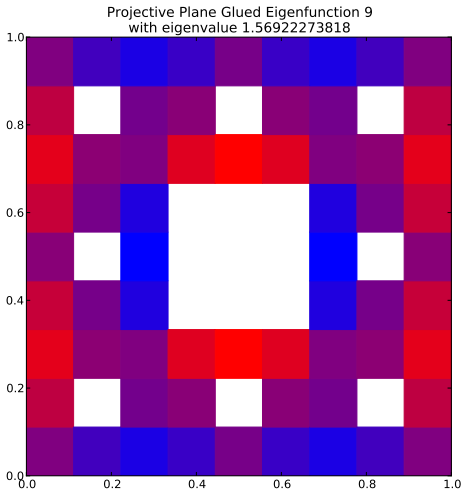
$M = 3$ Eigenfunction 92 has eigenvalue 2.00393016988





Compare to $m = 2$ eigenspace with eigenvalue 1.56922273818

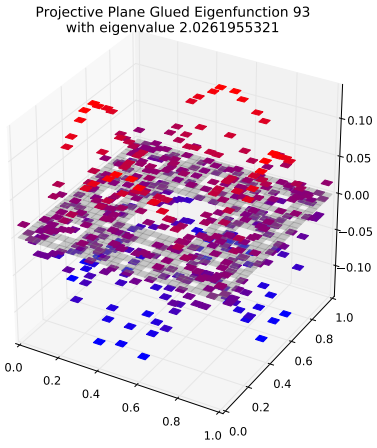


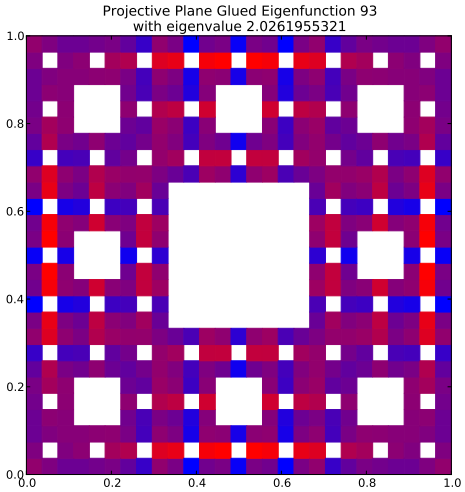


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.27702085952$
Dot Value: 0.2686074263136293

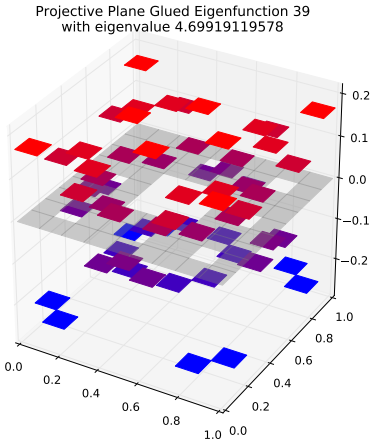
94 $M = 3$ Eigenfunction 93

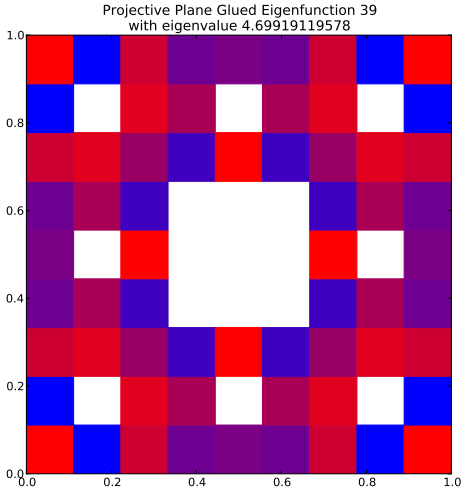
$M = 3$ Eigenfunction 93 has eigenvalue 2.0261955321





Compare to $m = 2$ eigenspace with eigenvalue 4.69919119578

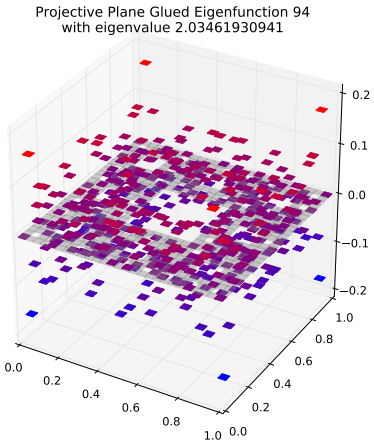


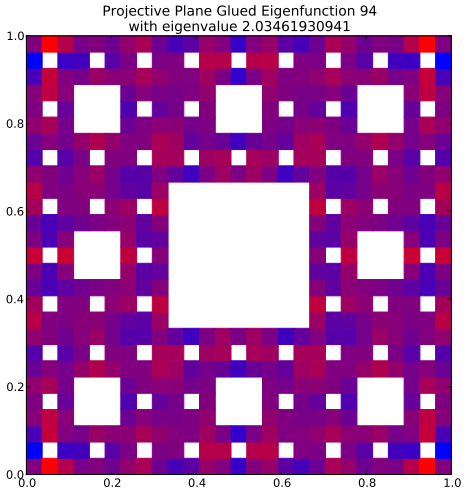


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.431179632342$
Dot Value: 0.3276381930192762

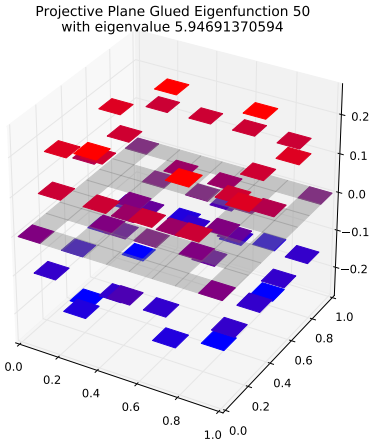
95 $M = 3$ Eigenfunction 94

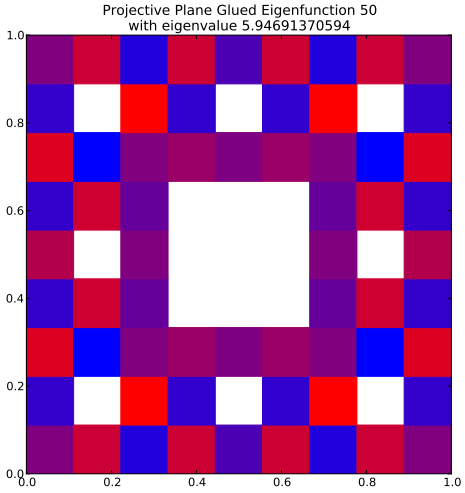
$M = 3$ Eigenfunction 94 has eigenvalue 2.03461930941





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

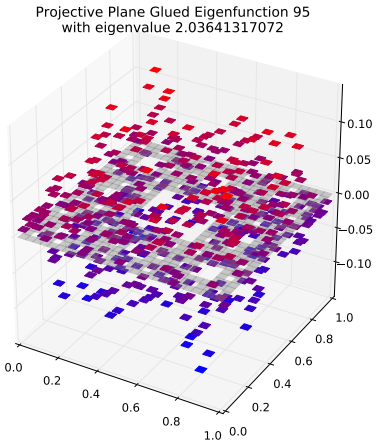


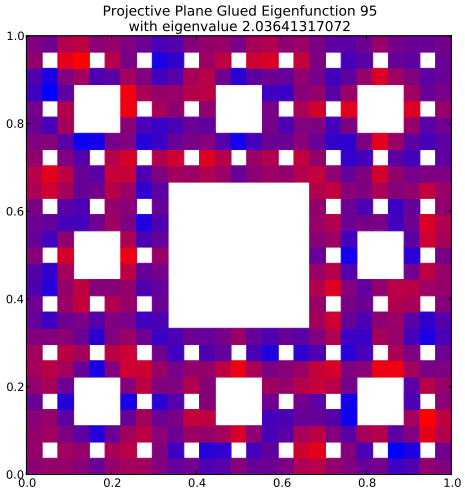


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.342130289764$
Dot Value: 0.28024593779748774

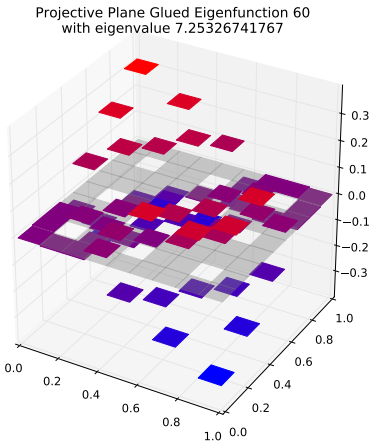
96 $M = 3$ Eigenfunction 95

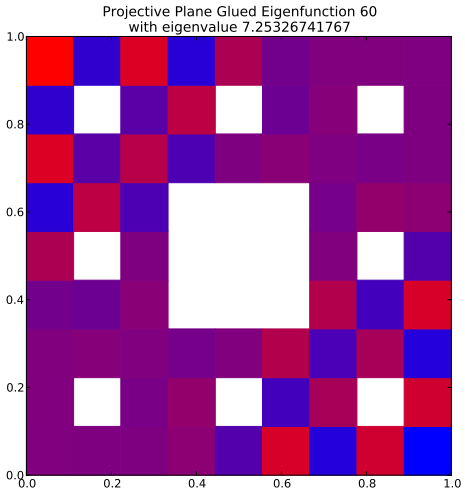
$M = 3$ Eigenfunction 95 has eigenvalue 2.03641317072





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

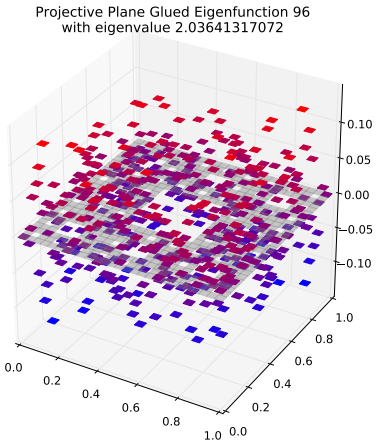


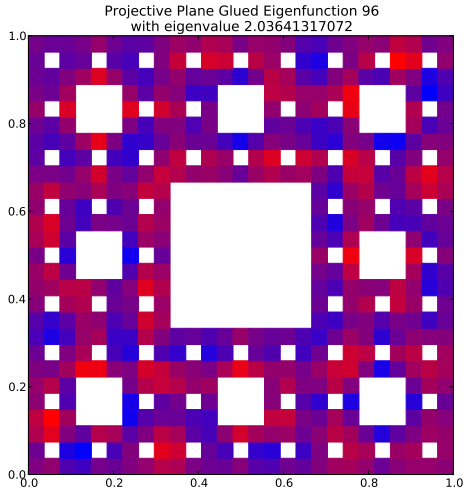


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.280758043714$
Dot Value: 0.4105852070345878

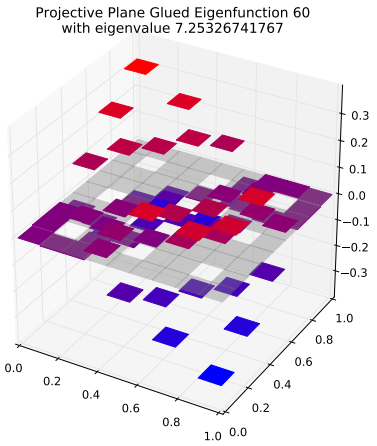
97 $M = 3$ Eigenfunction 96

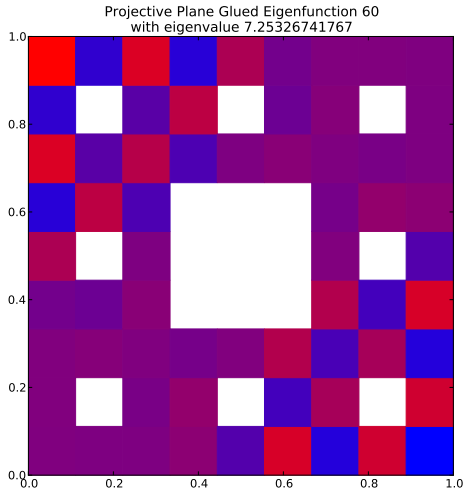
$M = 3$ Eigenfunction 96 has eigenvalue 2.03641317072





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

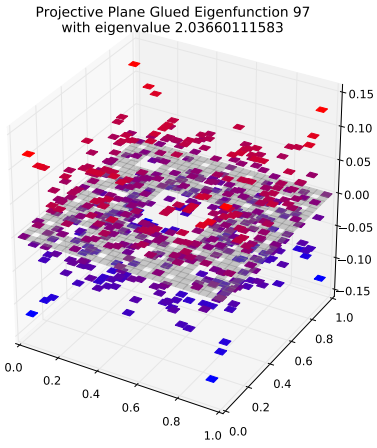


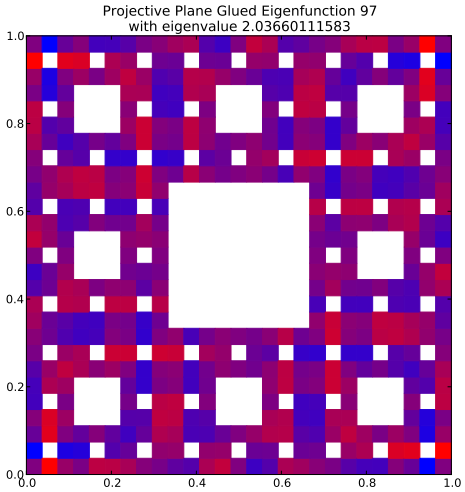


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.280758043714$
Dot Value: 0.4105852070348346

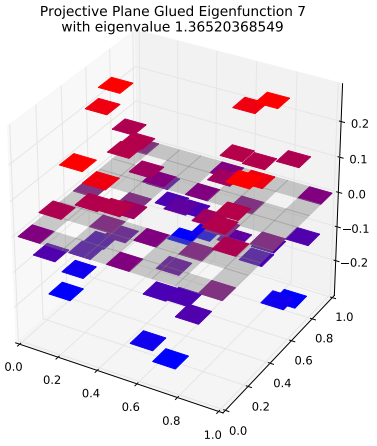
98 $M = 3$ Eigenfunction 97

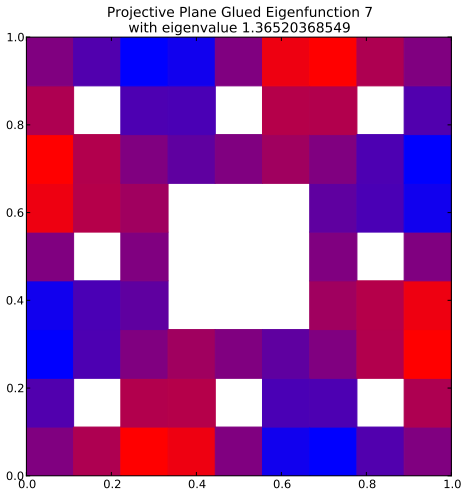
$M = 3$ Eigenfunction 97 has eigenvalue 2.03660111583





Compare to $m = 2$ eigenspace with eigenvalue 1.36520368549

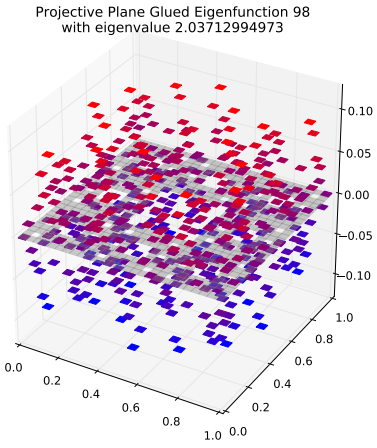


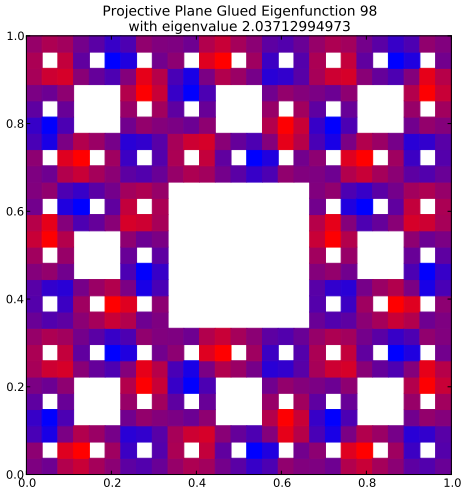


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.49179286394$
Dot Value: 0.2956332476273248

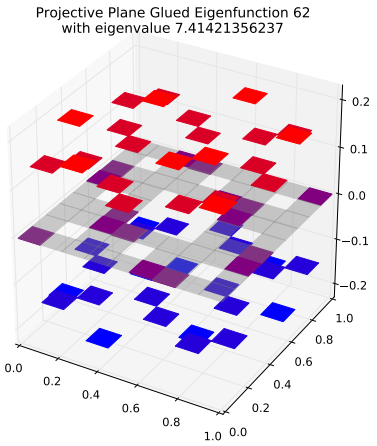
99 $M = 3$ Eigenfunction 98

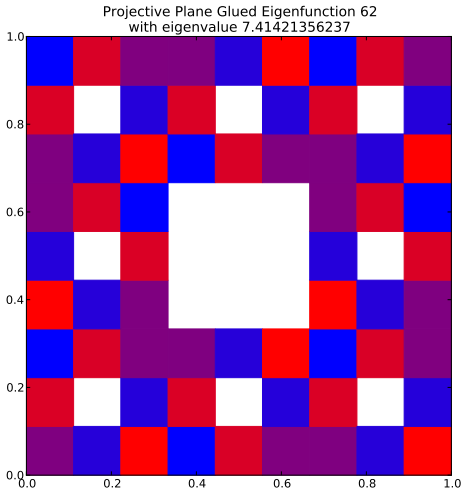
$M = 3$ Eigenfunction 98 has eigenvalue 2.03712994973





Compare to $m = 2$ eigenspace with eigenvalue 7.41421356237
(Note: Eigenspace Dimension > 1)

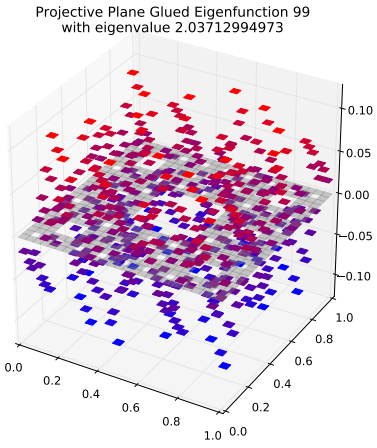


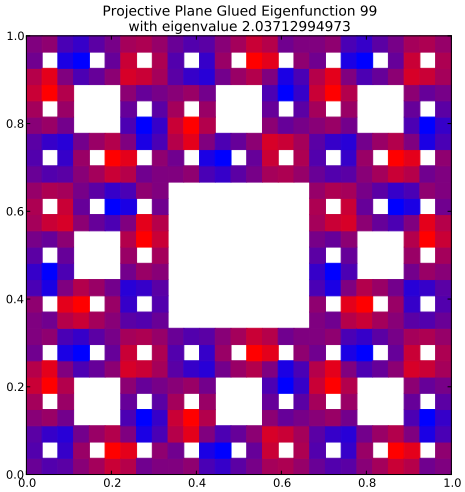


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.274760085152$
Dot Value: 0.0017108198585332746

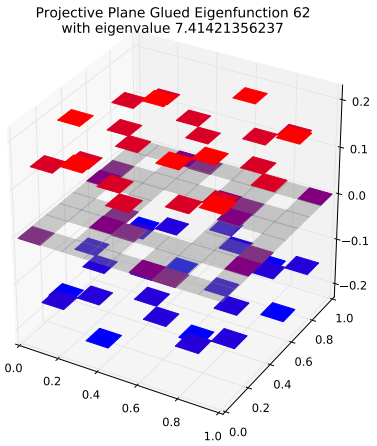
100 $M = 3$ Eigenfunction 99

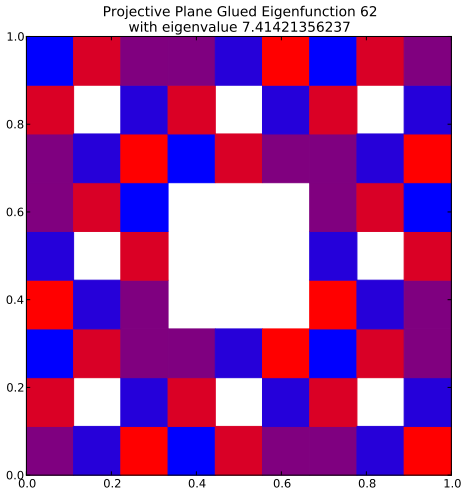
$M = 3$ Eigenfunction 99 has eigenvalue 2.03712994973





Compare to $m = 2$ eigenspace with eigenvalue 7.41421356237
(Note: Eigenspace Dimension > 1)

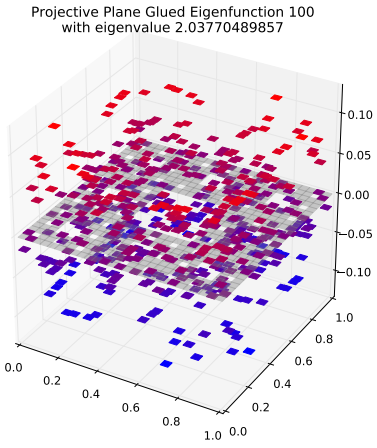


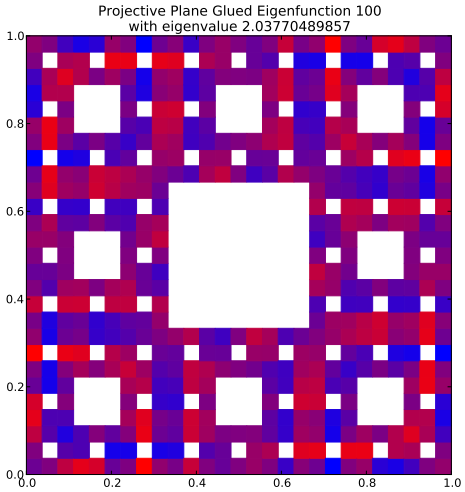


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.274760085152$
Dot Value: 0.0017108198585331635

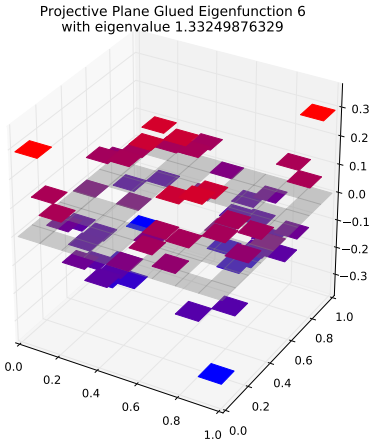
101 $M = 3$ Eigenfunction 100

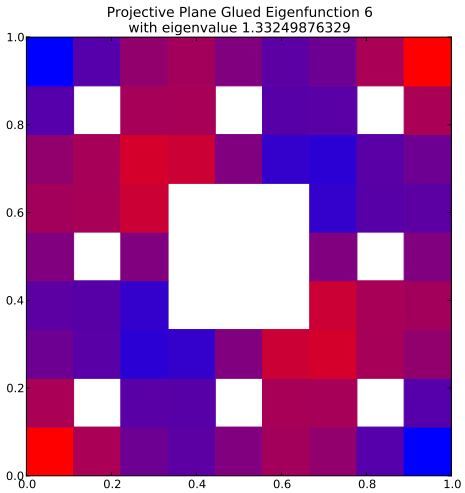
$M = 3$ Eigenfunction 100 has eigenvalue 2.03770489857





Compare to $m = 2$ eigenspace with eigenvalue 1.33249876329

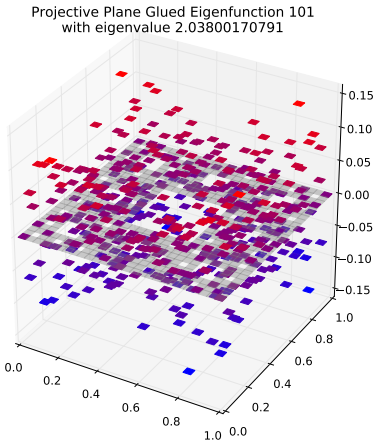


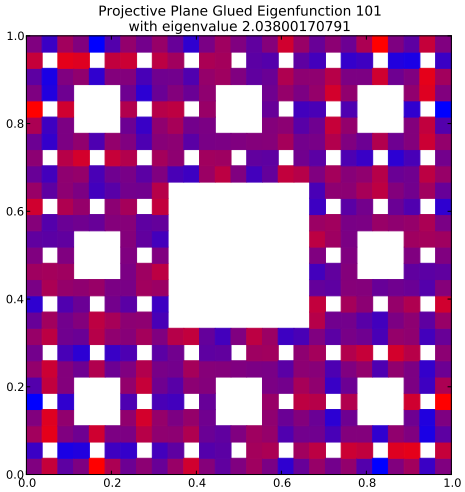


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.52923586476$
Dot Value: 0.2231085764775964

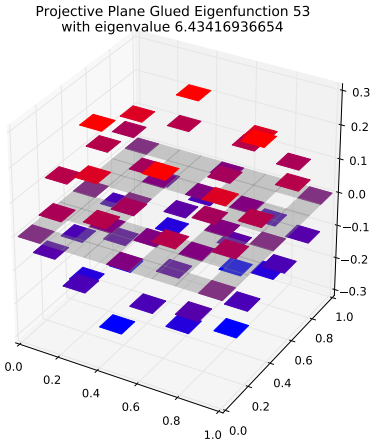
102 $M = 3$ Eigenfunction 101

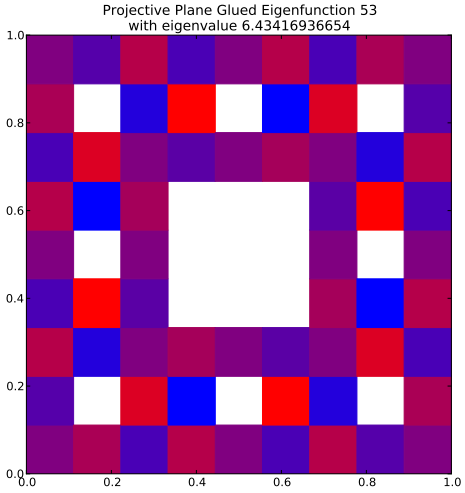
$M = 3$ Eigenfunction 101 has eigenvalue 2.03800170791





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

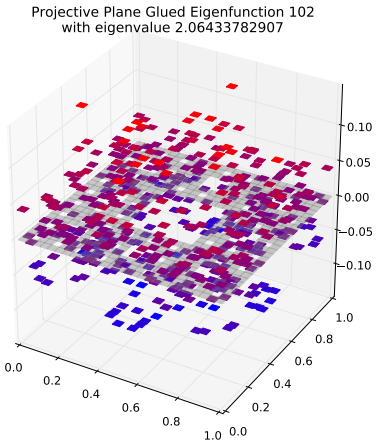


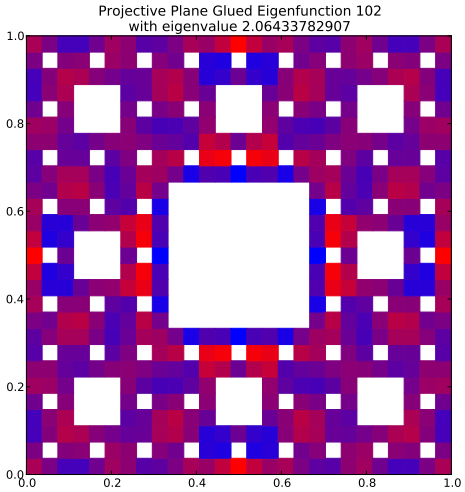


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.316746667956$
Dot Value: 0.05397313337891407

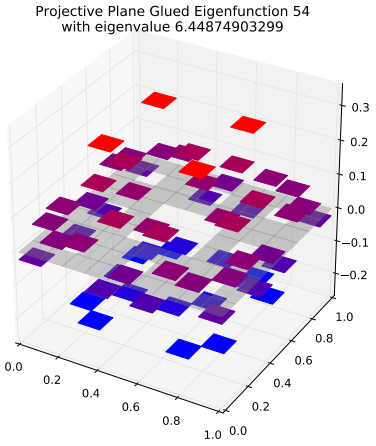
103 $M = 3$ Eigenfunction 102

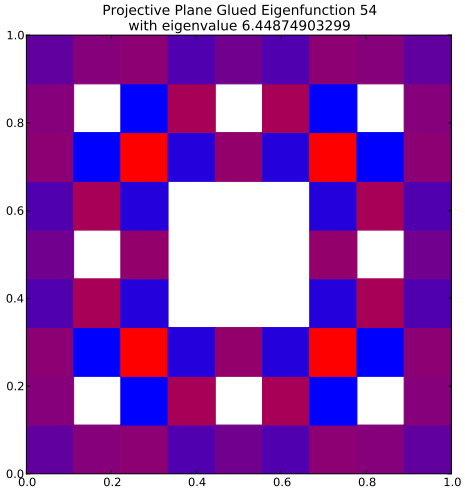
$M = 3$ Eigenfunction 102 has eigenvalue 2.06433782907





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

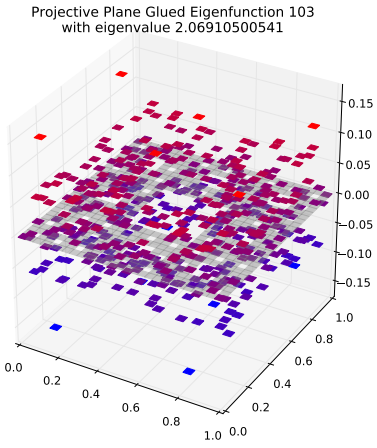


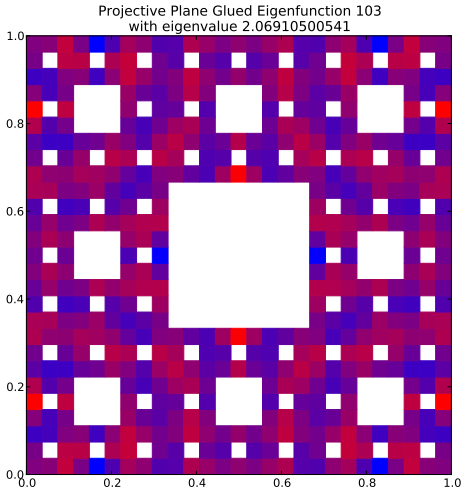


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.32011446228$
Dot Value: 0.35124162631759803

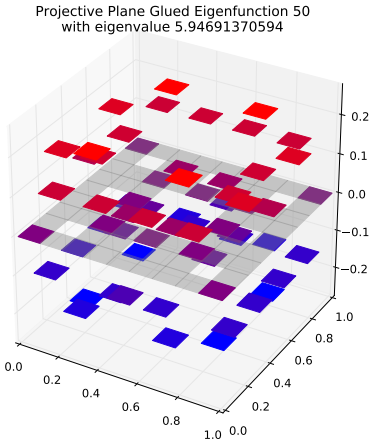
104 $M = 3$ Eigenfunction 103

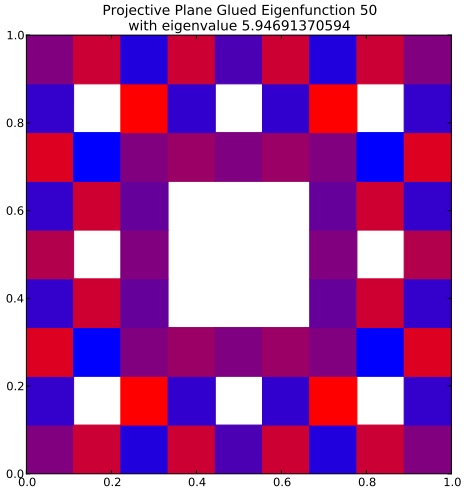
$M = 3$ Eigenfunction 103 has eigenvalue 2.06910500541





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

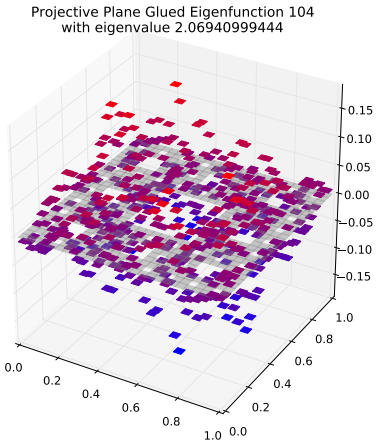


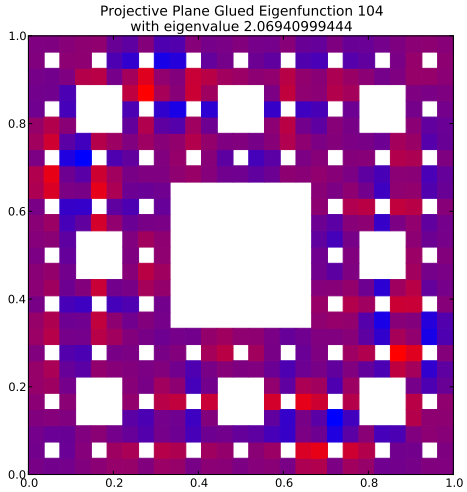


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.347929212987$
Dot Value: 0.2990335838239834

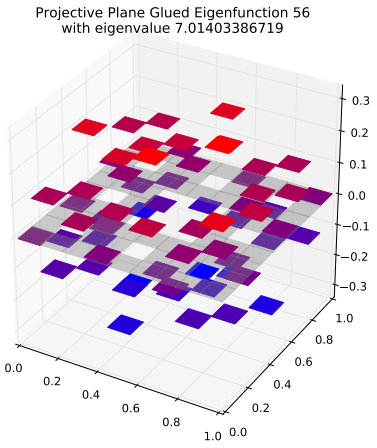
105 $M = 3$ Eigenfunction 104

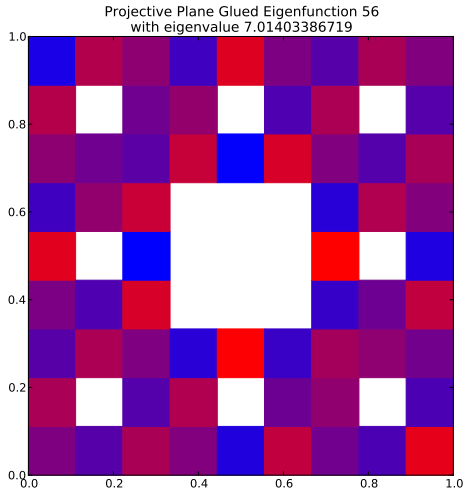
$M = 3$ Eigenfunction 104 has eigenvalue 2.06940999444





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

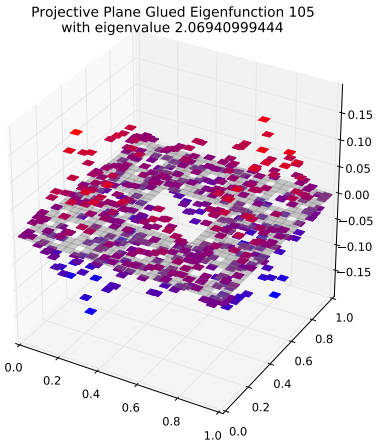


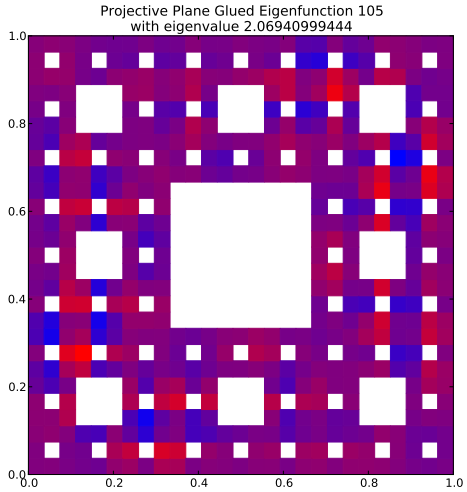


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.295038494769$
Dot Value: 0.4343075963268249

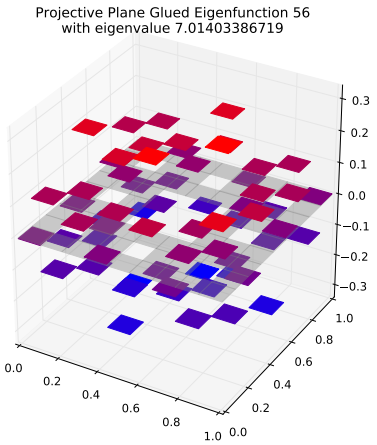
106 $M = 3$ Eigenfunction 105

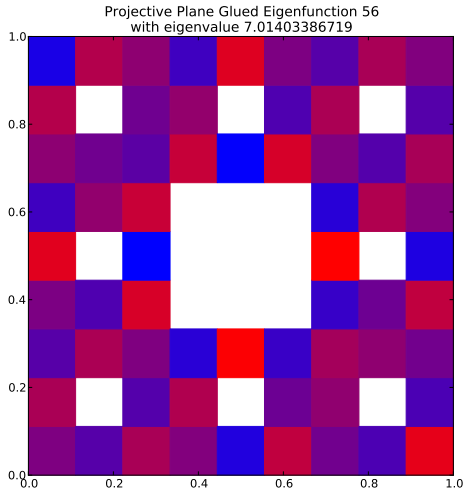
$M = 3$ Eigenfunction 105 has eigenvalue 2.06940999444





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

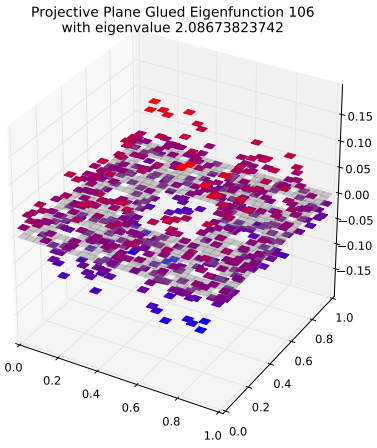


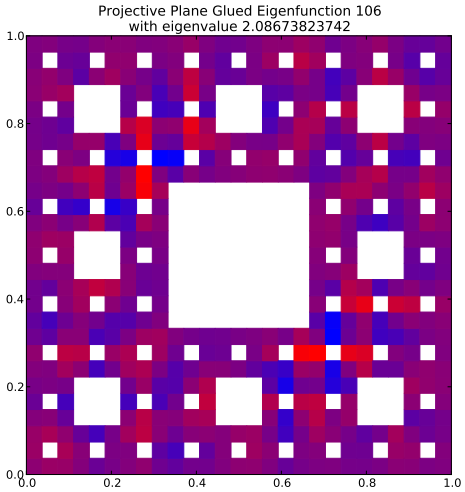


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.295038494769$
Dot Value: 0.4343075963268489

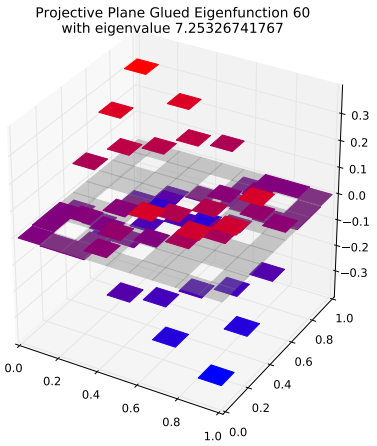
107 $M = 3$ Eigenfunction 106

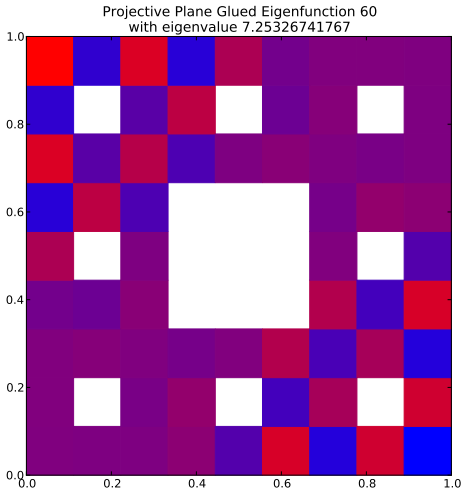
$M = 3$ Eigenfunction 106 has eigenvalue 2.08673823742





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

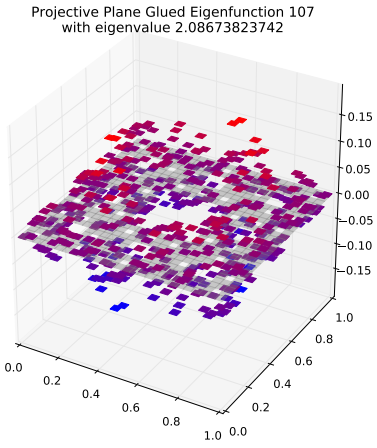


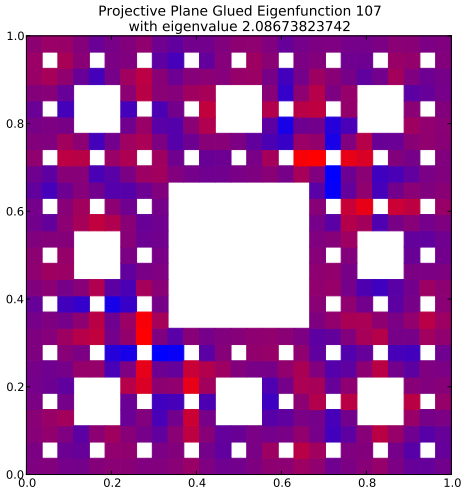


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2876963053$
Dot Value: 0.1331497120044084

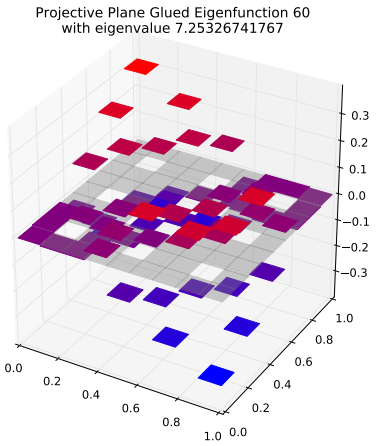
108 $M = 3$ Eigenfunction 107

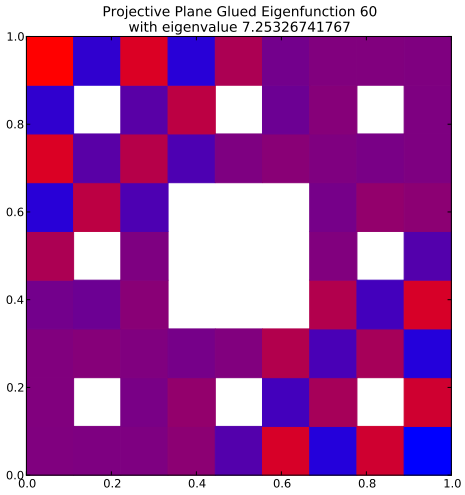
$M = 3$ Eigenfunction 107 has eigenvalue 2.08673823742





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

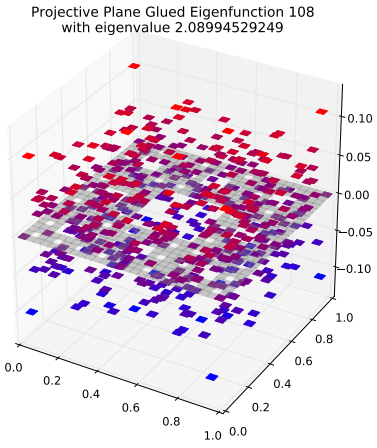


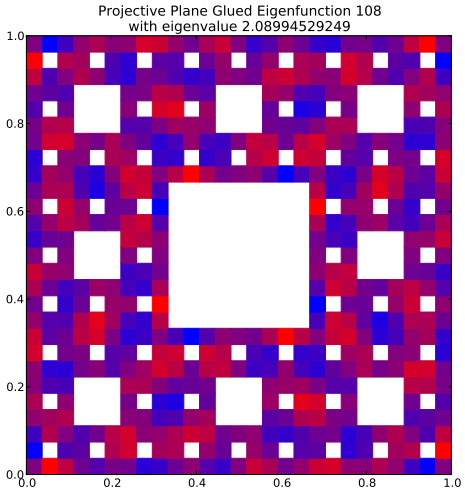


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.2876963053$
Dot Value: 0.13314971200433845

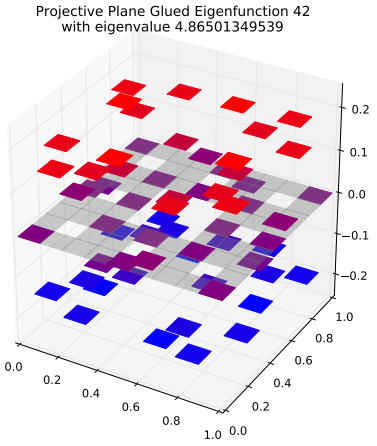
109 $M = 3$ Eigenfunction 108

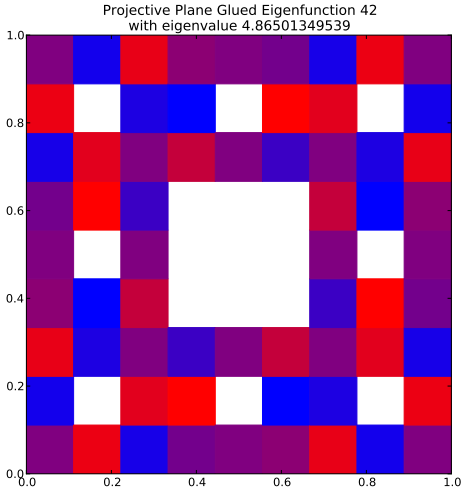
$M = 3$ Eigenfunction 108 has eigenvalue 2.08994529249





Compare to $m = 2$ eigenspace with eigenvalue 4.86501349539

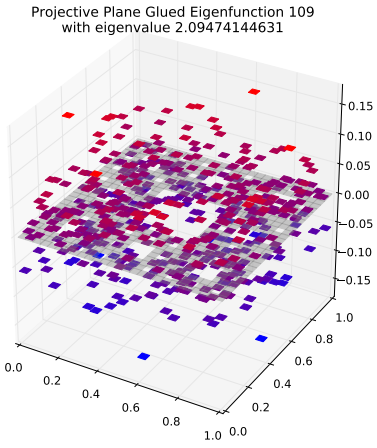


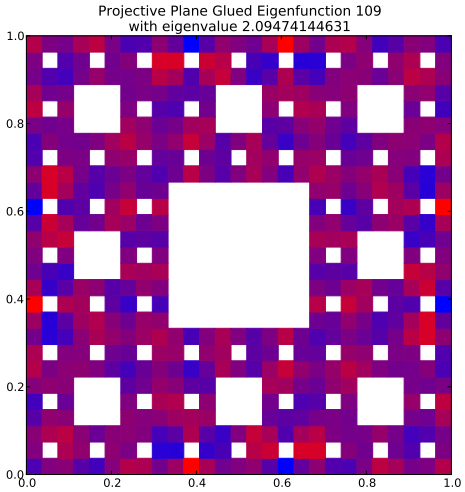


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.429586741018$
Dot Value: 0.31805119235322277

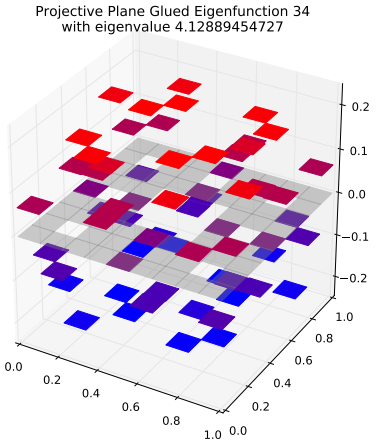
110 $M = 3$ Eigenfunction 109

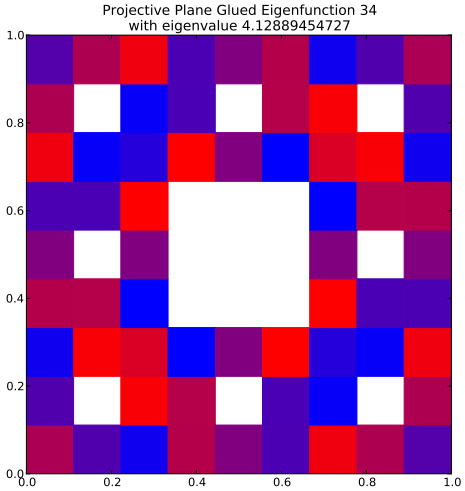
$M = 3$ Eigenfunction 109 has eigenvalue 2.09474144631





Compare to $m = 2$ eigenspace with eigenvalue 4.12889454727

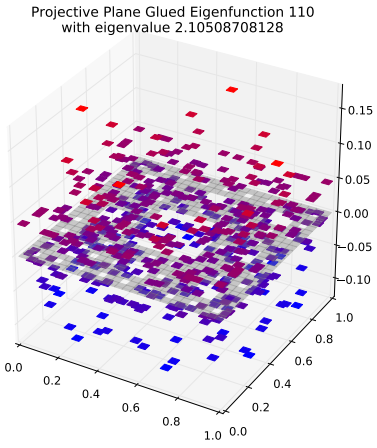


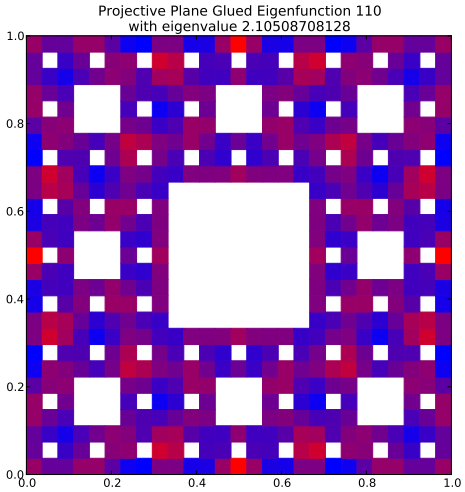


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.507337114651$
Dot Value: 0.20612425364085596

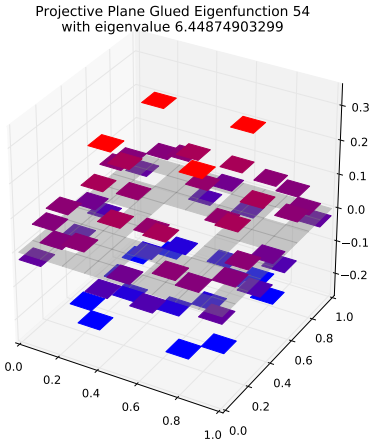
111 $M = 3$ Eigenfunction 110

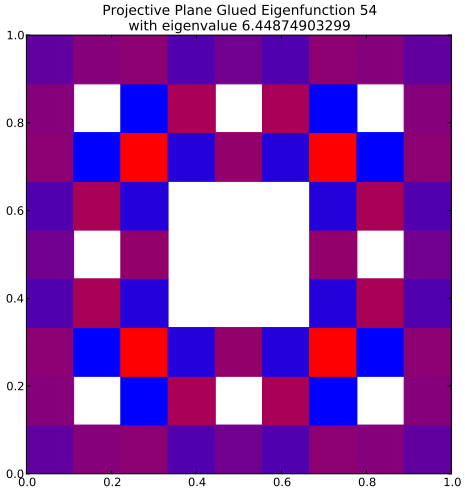
$M = 3$ Eigenfunction 110 has eigenvalue 2.10508708128





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

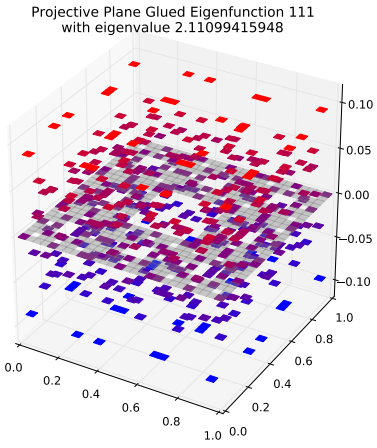


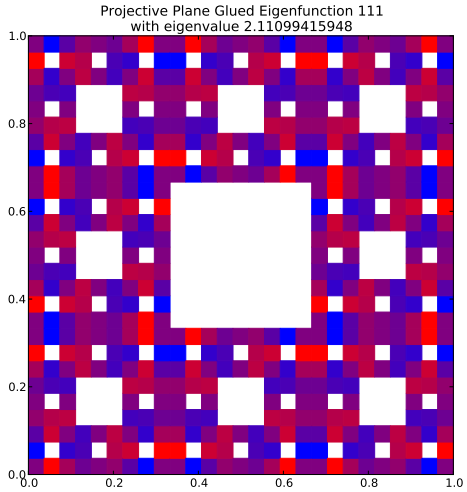


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.326433401349$
Dot Value: 0.2453253434413427

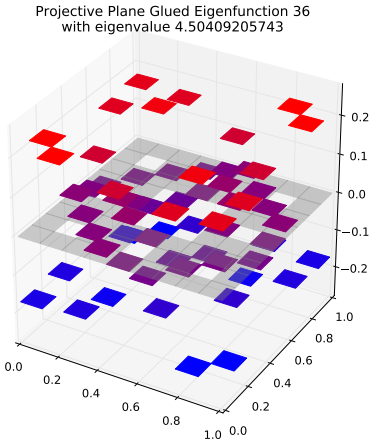
112 $M = 3$ Eigenfunction 111

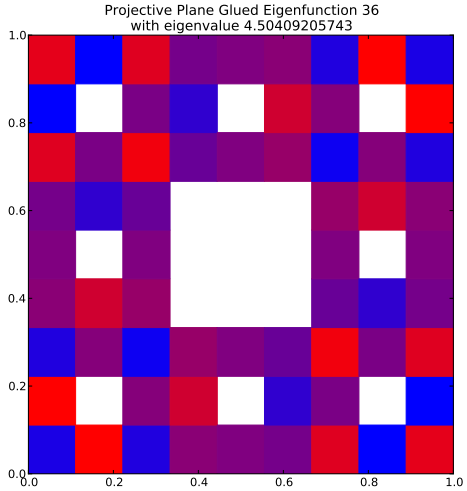
$M = 3$ Eigenfunction 111 has eigenvalue 2.11099415948





Compare to $m = 2$ eigenspace with eigenvalue 4.50409205743

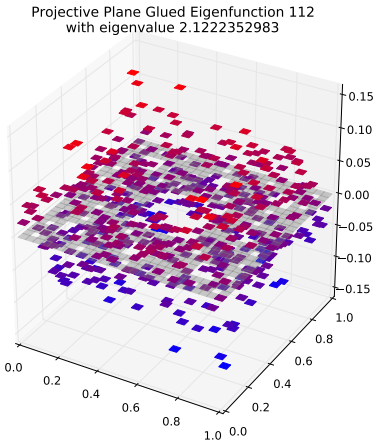


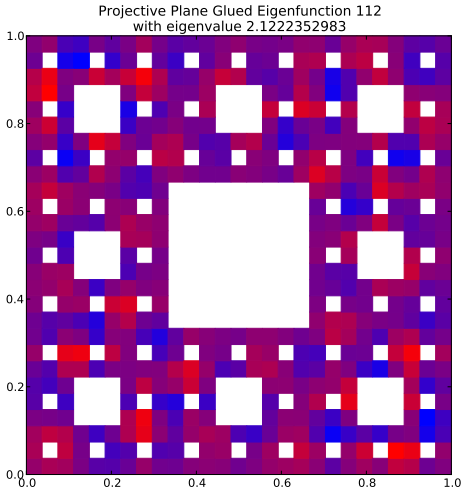


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.468683617601$
Dot Value: 2

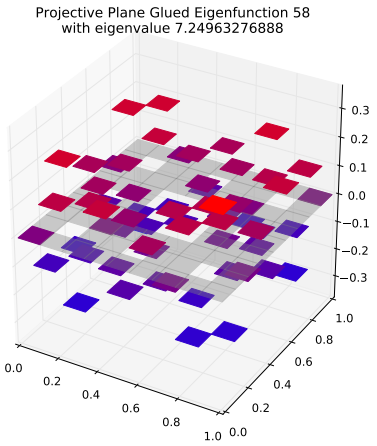
113 $M = 3$ Eigenfunction 112

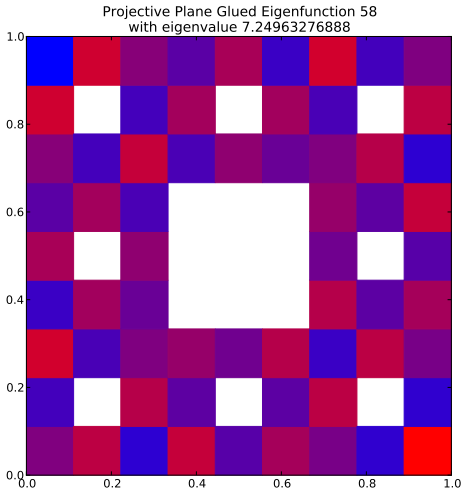
$M = 3$ Eigenfunction 112 has eigenvalue 2.1222352983





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

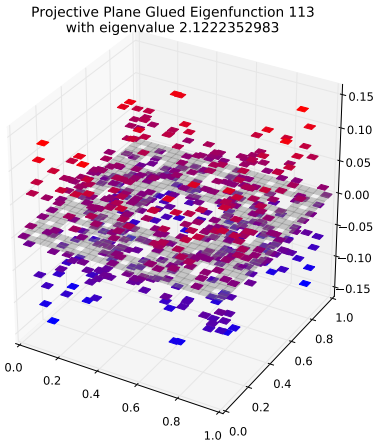


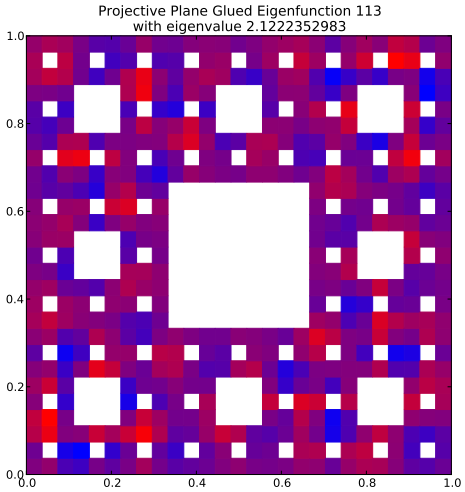


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.292736937988$
Dot Value: 0.04929695354159502

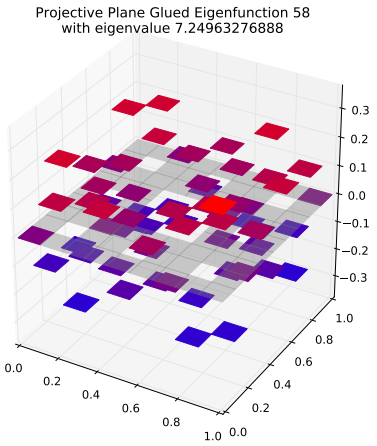
114 $M = 3$ Eigenfunction 113

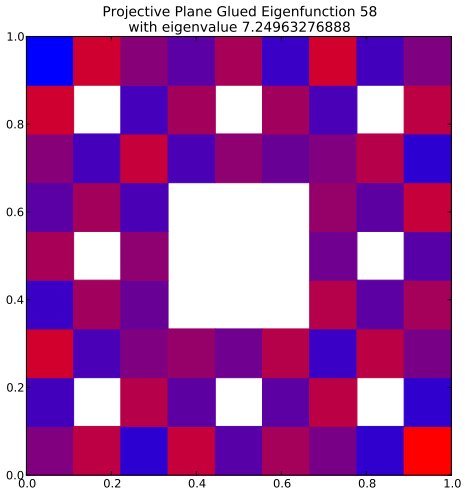
$M = 3$ Eigenfunction 113 has eigenvalue 2.1222352983





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

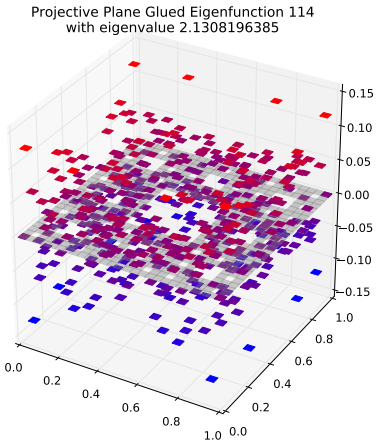


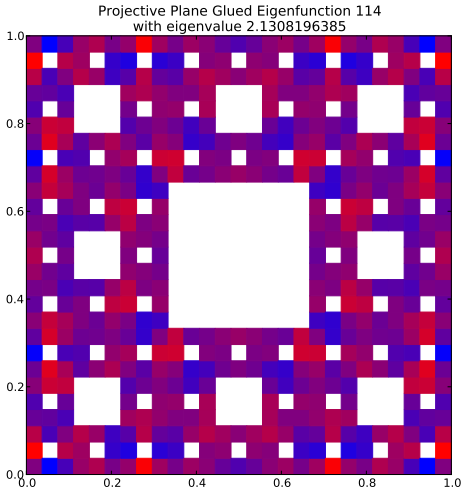


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.292736937988$
Dot Value: 0.04929695354161101

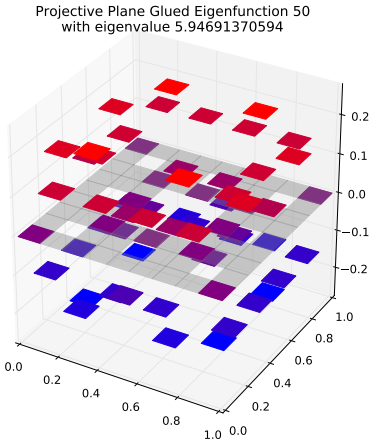
115 $M = 3$ Eigenfunction 114

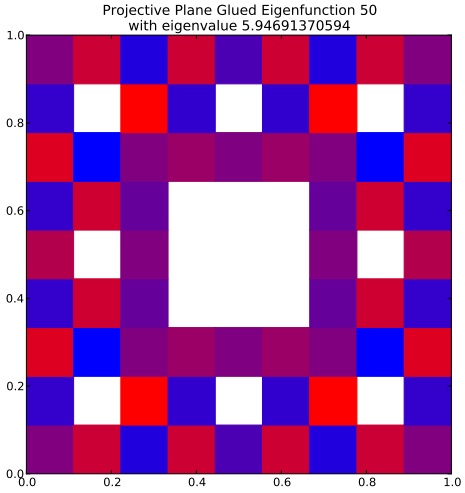
$M = 3$ Eigenfunction 114 has eigenvalue 2.1308196385





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

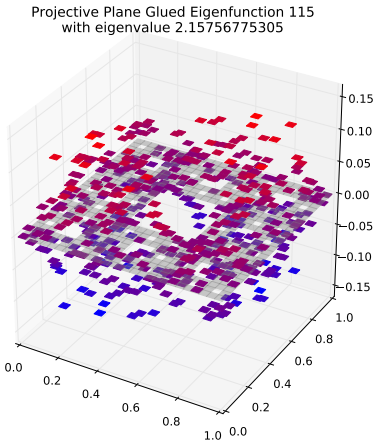


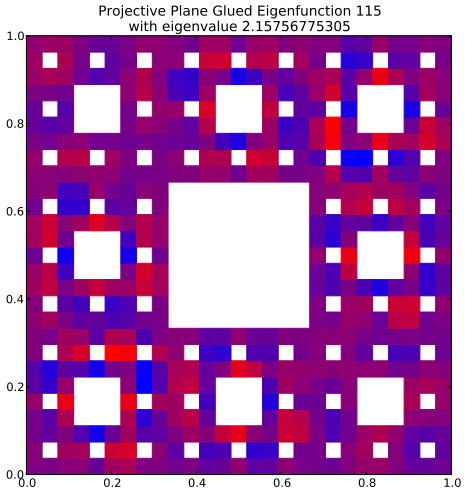


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.358306803136$
Dot Value: 0.200417306554719

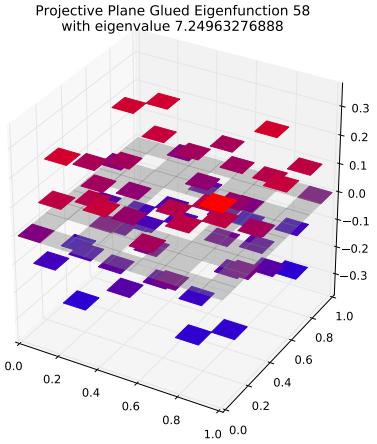
116 $M = 3$ Eigenfunction 115

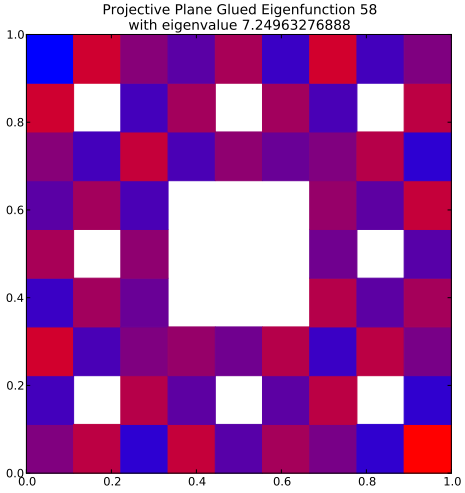
$M = 3$ Eigenfunction 115 has eigenvalue 2.15756775305





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

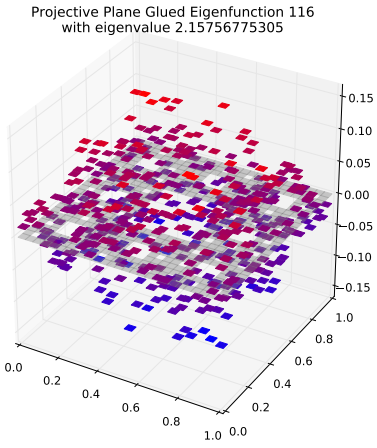


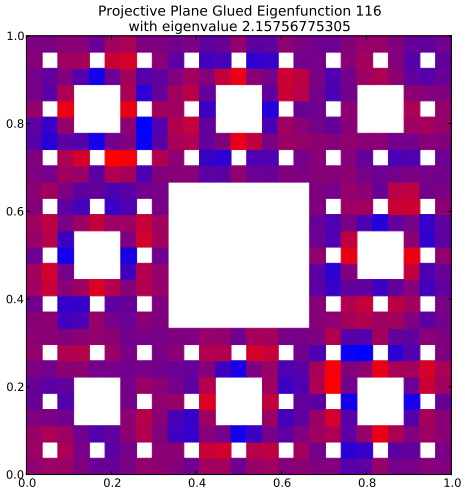


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.297610626887$
Dot Value: 0.1646341733414829

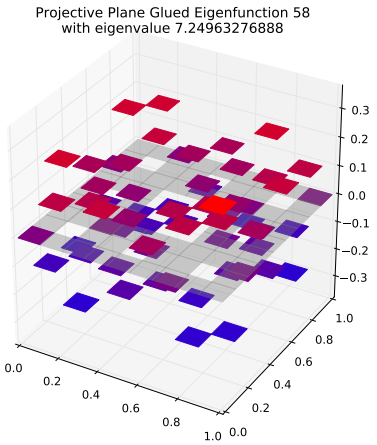
117 $M = 3$ Eigenfunction 116

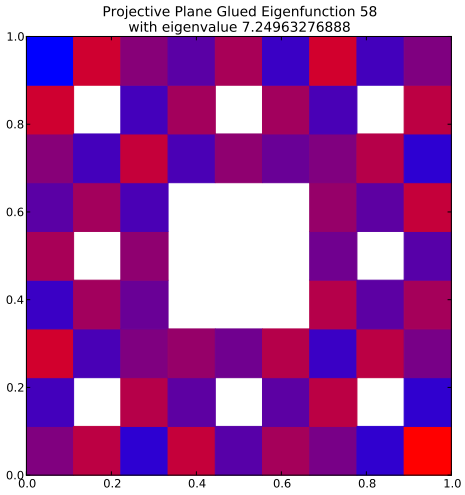
$M = 3$ Eigenfunction 116 has eigenvalue 2.15756775305





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

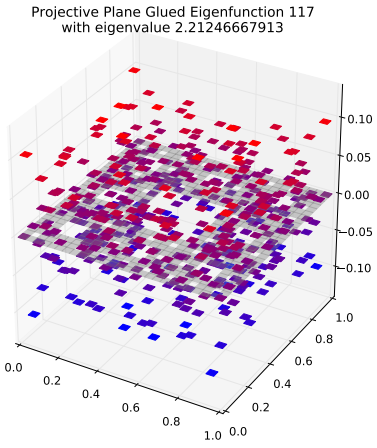


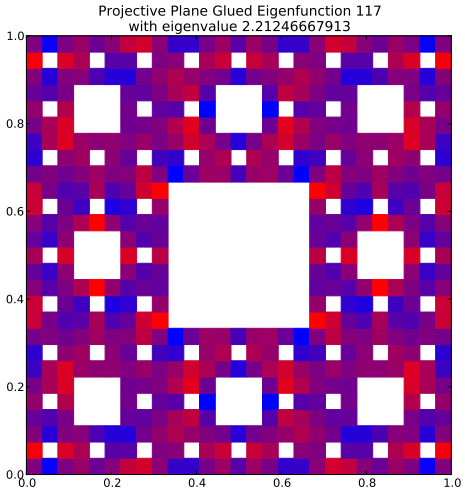


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.297610626887$
Dot Value: 0.16463417334152608

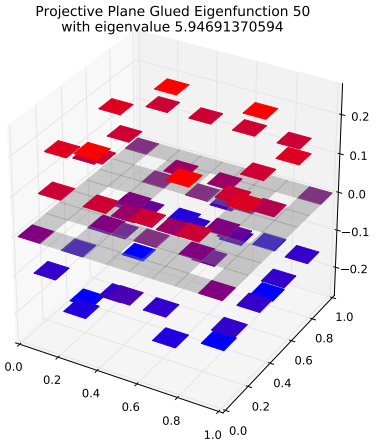
118 $M = 3$ Eigenfunction 117

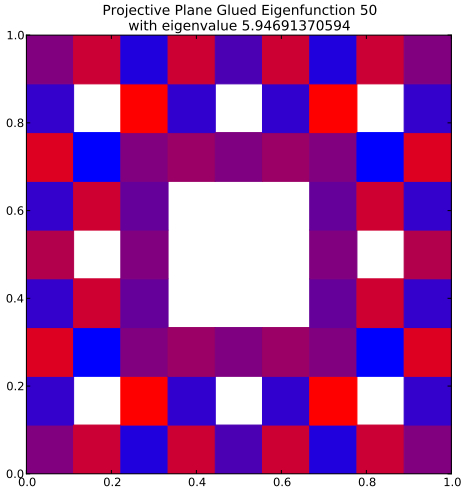
$M = 3$ Eigenfunction 117 has eigenvalue 2.21246667913





Compare to $m = 2$ eigenspace with eigenvalue 5.94691370594

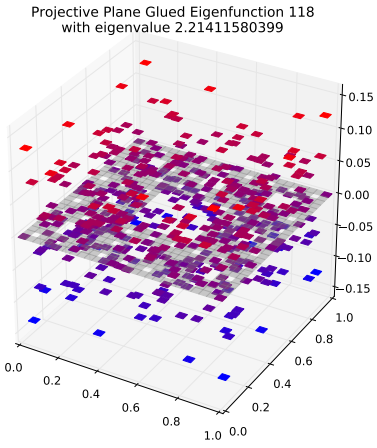


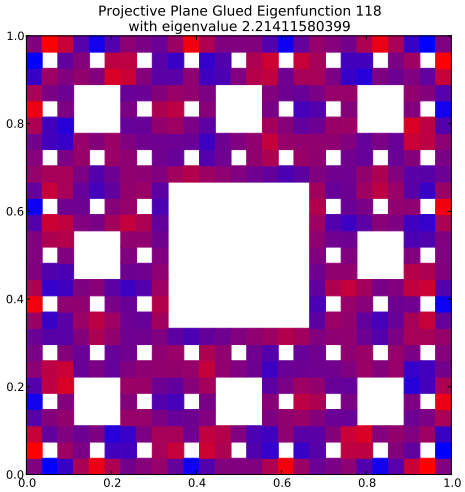


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.3720361163$
Dot Value: 0.12928064901028413

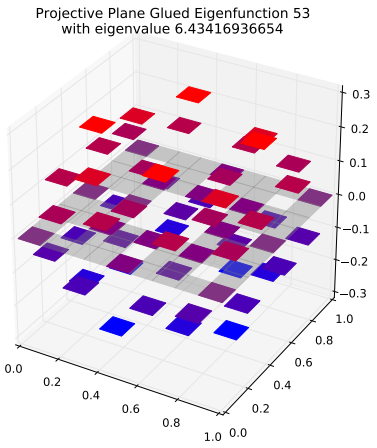
119 $M = 3$ Eigenfunction 118

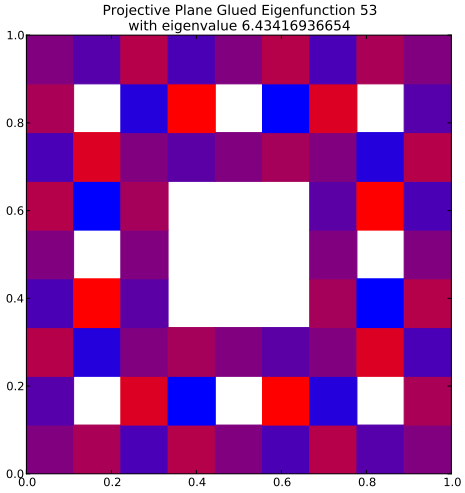
$M = 3$ Eigenfunction 118 has eigenvalue 2.21411580399





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

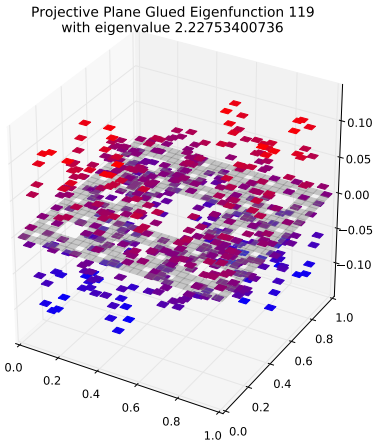


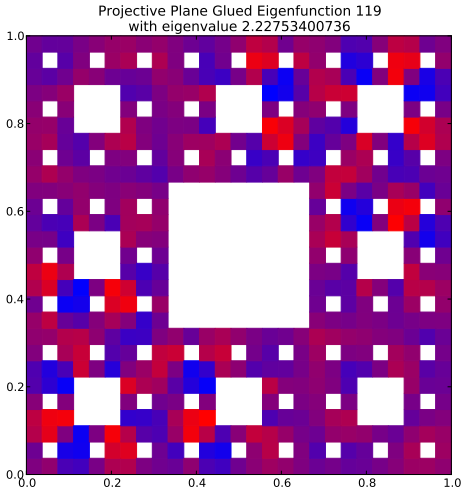


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.344118359008$
Dot Value: 0.07591395135006518

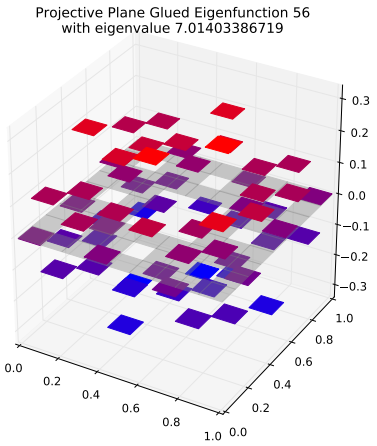
120 $M = 3$ Eigenfunction 119

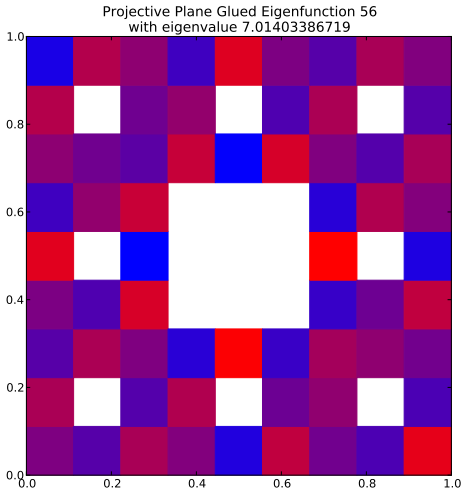
$M = 3$ Eigenfunction 119 has eigenvalue 2.22753400736





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

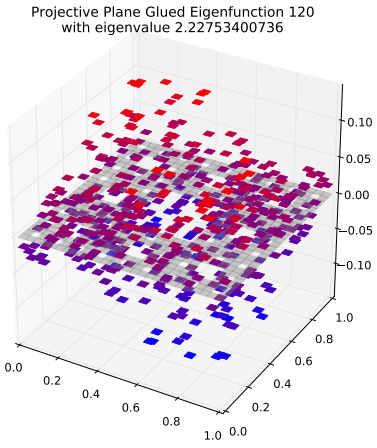


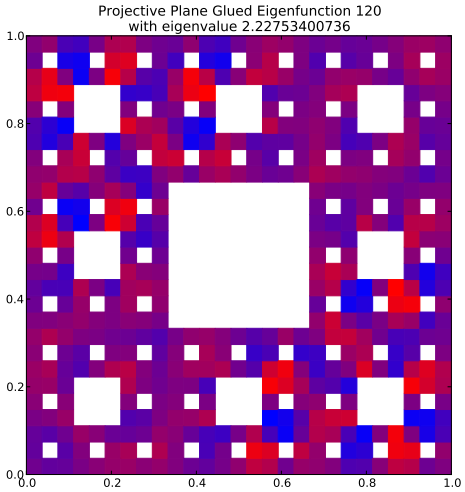


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.317582442505$
Dot Value: 0.119820643948503

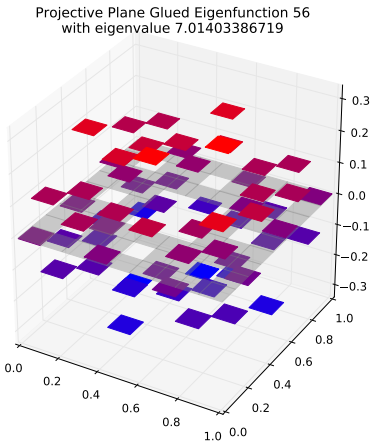
121 $M = 3$ Eigenfunction 120

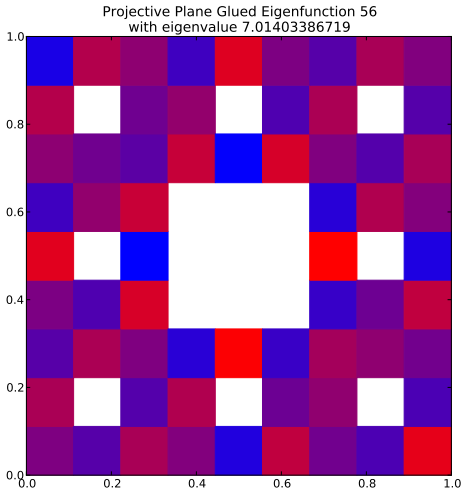
$M = 3$ Eigenfunction 120 has eigenvalue 2.22753400736





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

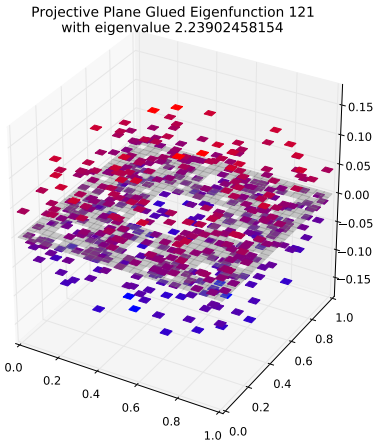


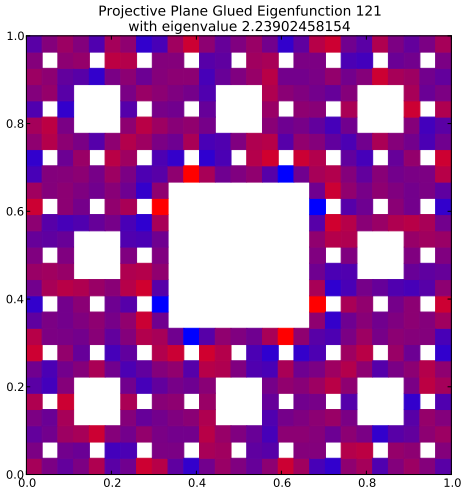


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.317582442505$
Dot Value: 0.11982064394850289

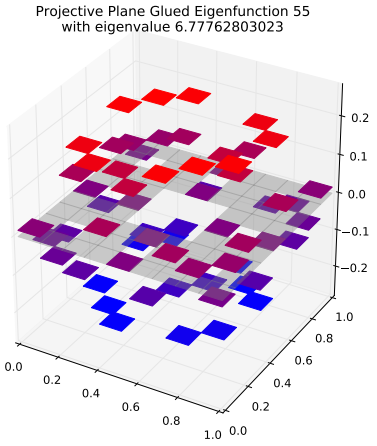
122 $M = 3$ Eigenfunction 121

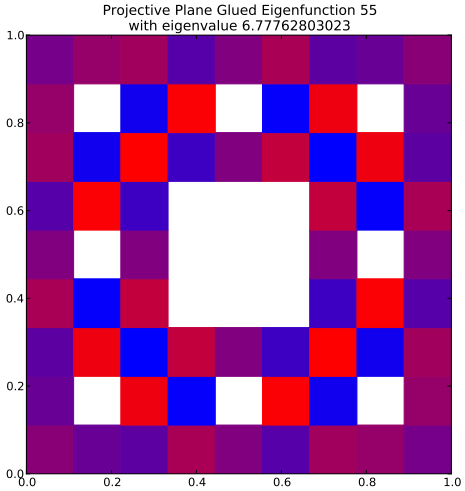
$M = 3$ Eigenfunction 121 has eigenvalue 2.23902458154





Compare to $m = 2$ eigenspace with eigenvalue 6.77762803023

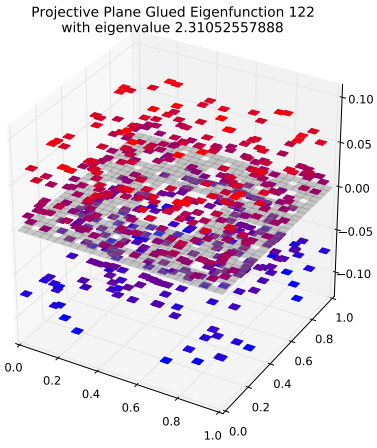


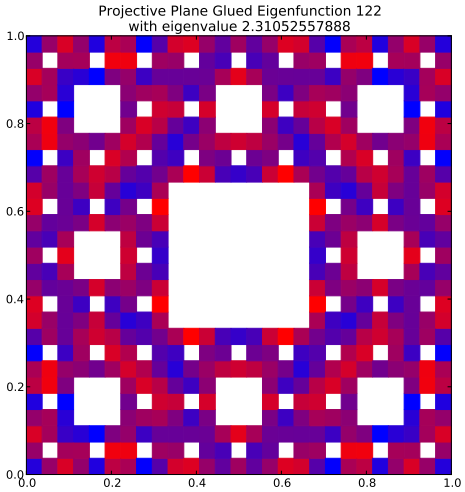


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.330355187914$
Dot Value: 0.15906872237364877

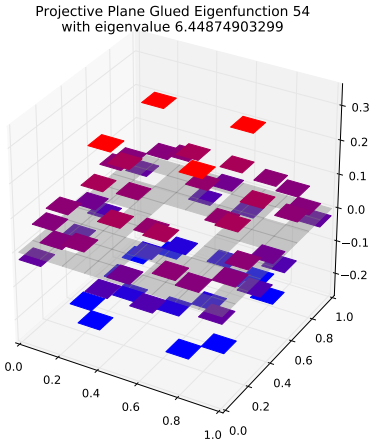
123 $M = 3$ Eigenfunction 122

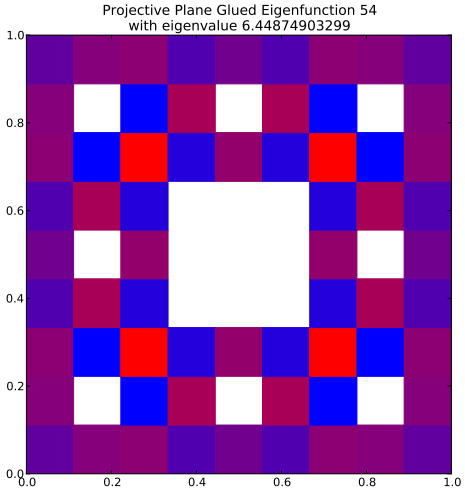
$M = 3$ Eigenfunction 122 has eigenvalue 2.31052557888





Compare to $m = 2$ eigenspace with eigenvalue 6.44874903299

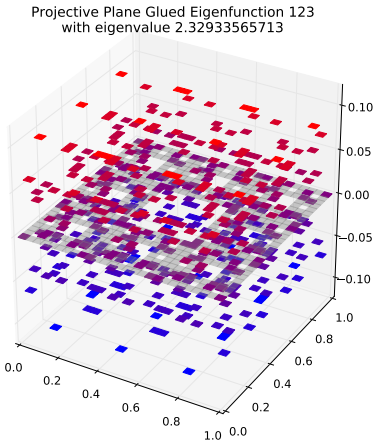


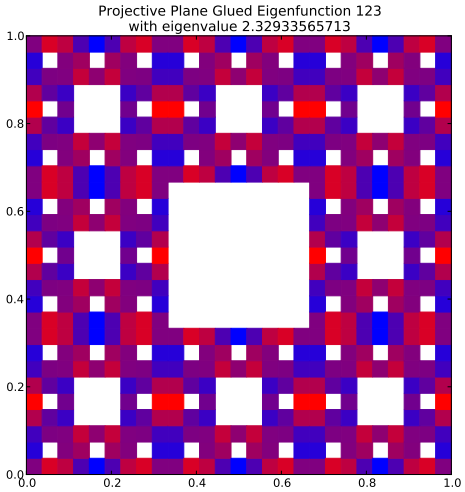


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.358290509843$
Dot Value: 0.235642406282922

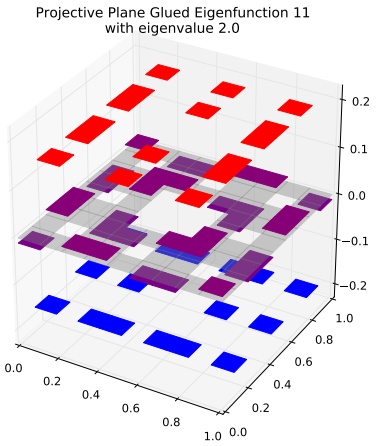
124 $M = 3$ Eigenfunction 123

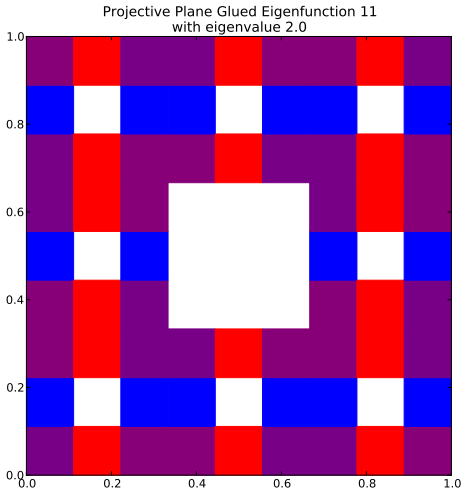
$M = 3$ Eigenfunction 123 has eigenvalue 2.32933565713





Compare to $m = 2$ eigenspace with eigenvalue 2.0
(Note: Eigenspace Dimension > 1)

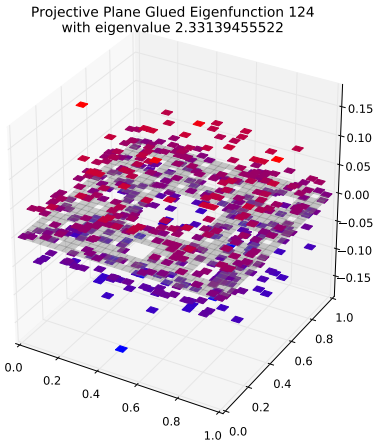


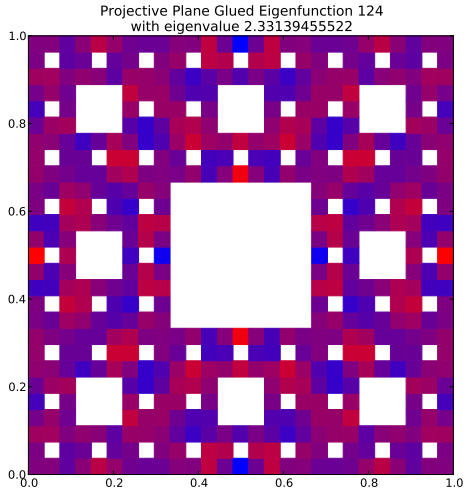


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.16466782857$
Dot Value: 0.0

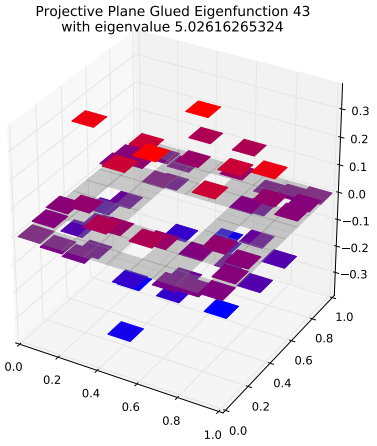
125 $M = 3$ Eigenfunction 124

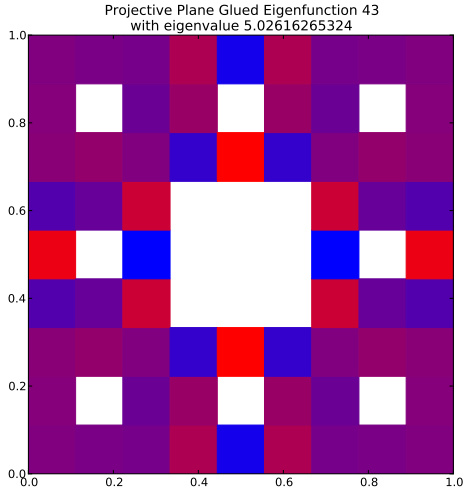
$M = 3$ Eigenfunction 124 has eigenvalue 2.33139455522





Compare to $m = 2$ eigenspace with eigenvalue 5.02616265324

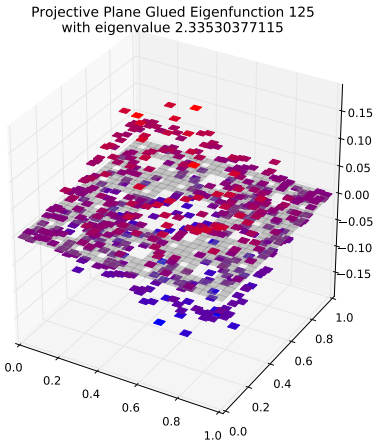


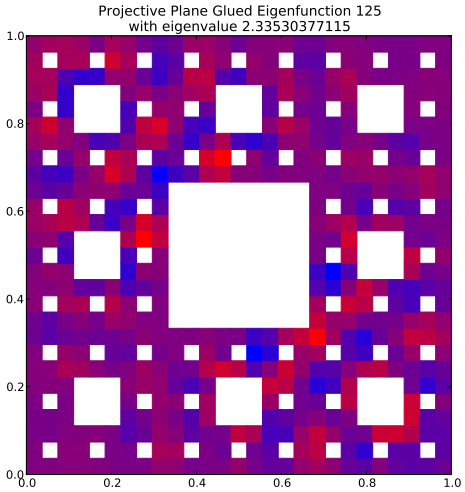


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.463851792324$
Dot Value: 0.23684131172816103

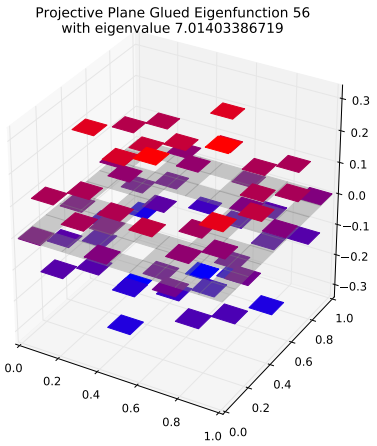
126 $M = 3$ Eigenfunction 125

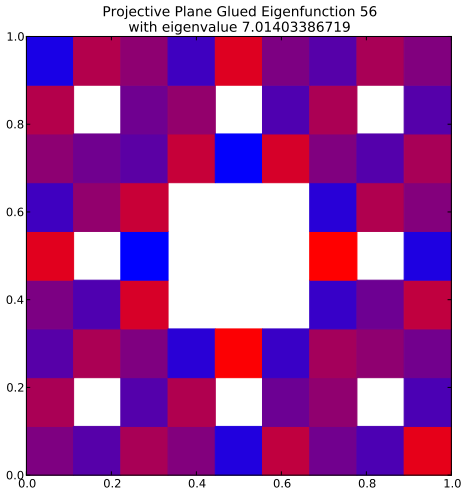
$M = 3$ Eigenfunction 125 has eigenvalue 2.33530377115





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

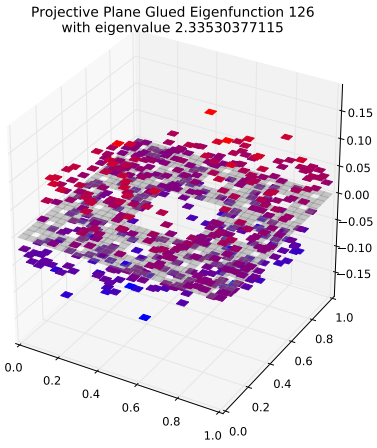


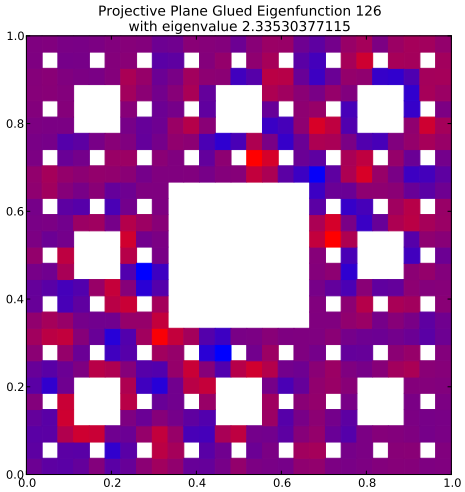


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.332947318956$
Dot Value: 0.22291385057650626

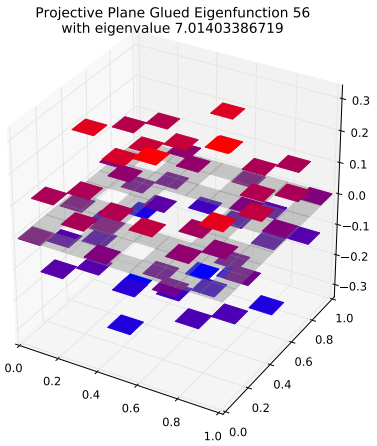
127 $M = 3$ Eigenfunction 126

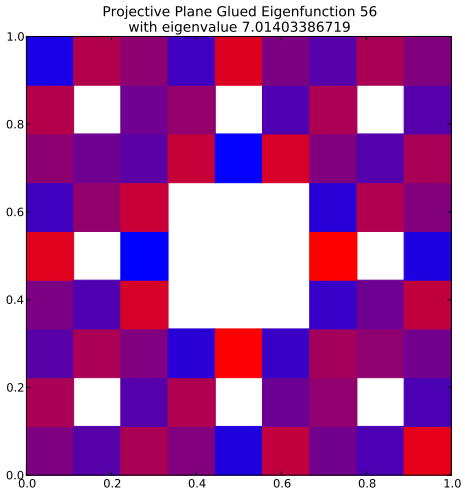
$M = 3$ Eigenfunction 126 has eigenvalue 2.33530377115





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

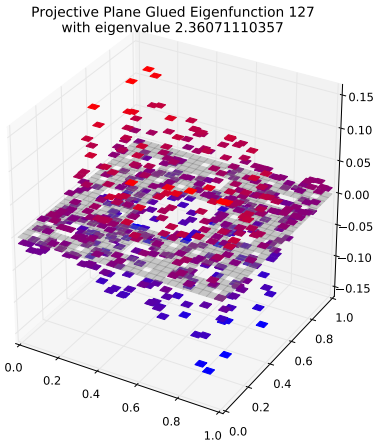


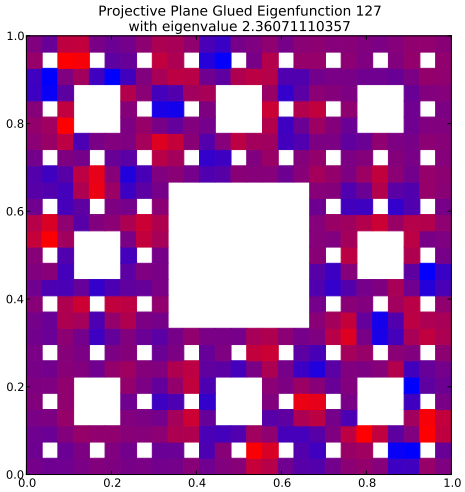


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.332947318956$
Dot Value: 0.2229138505764956

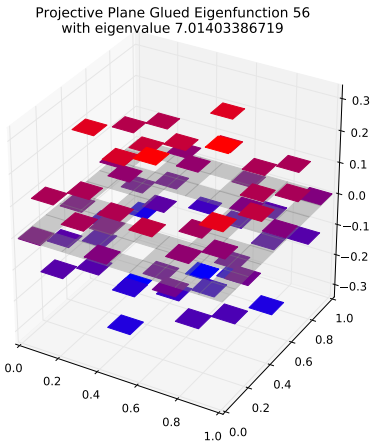
128 $M = 3$ Eigenfunction 127

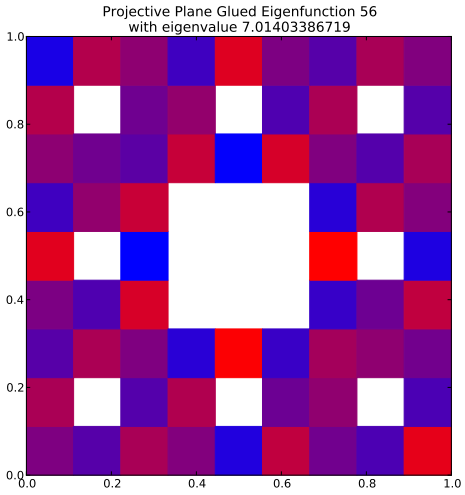
$M = 3$ Eigenfunction 127 has eigenvalue 2.36071110357





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

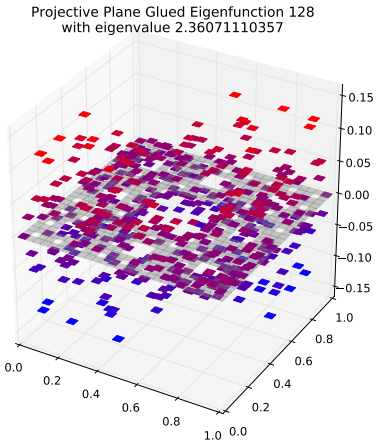


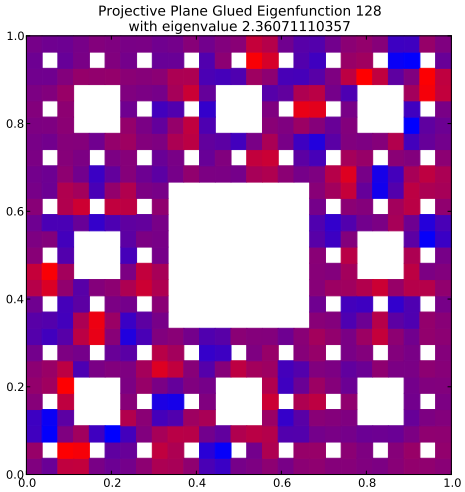


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.336569675634$
Dot Value: 0.4365670469378792

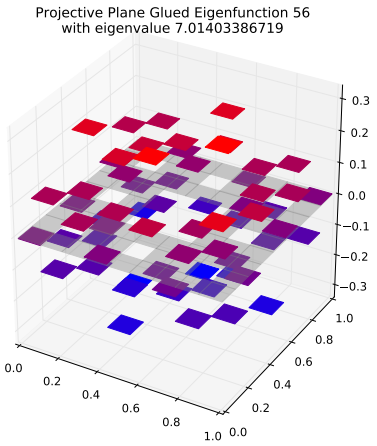
129 $M = 3$ Eigenfunction 128

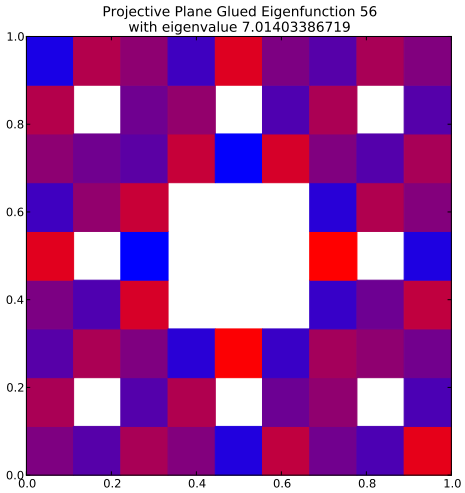
$M = 3$ Eigenfunction 128 has eigenvalue 2.36071110357





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

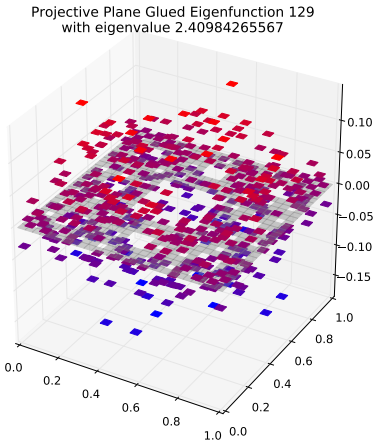


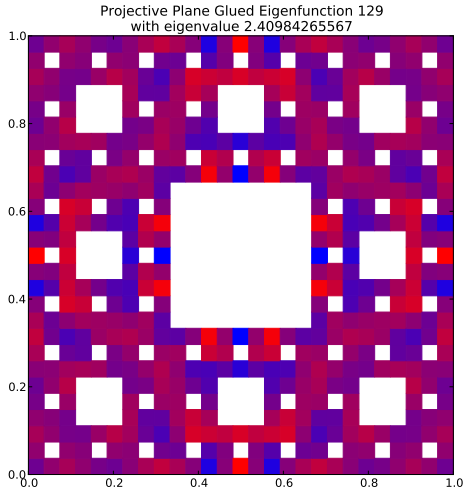


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.336569675634$
Dot Value: 0.43656704693793014

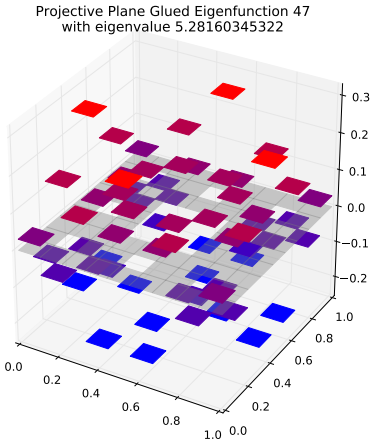
130 $M = 3$ Eigenfunction 129

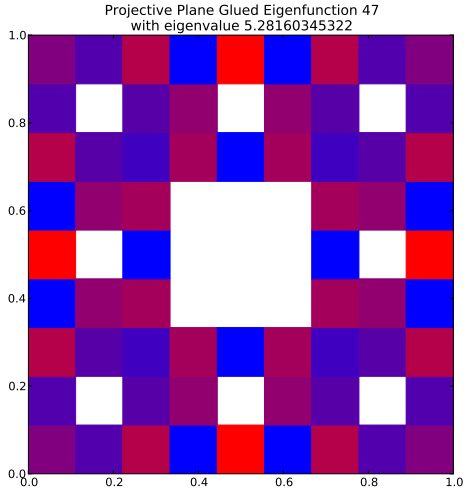
$M = 3$ Eigenfunction 129 has eigenvalue 2.40984265567





Compare to $m = 2$ eigenspace with eigenvalue 5.28160345322

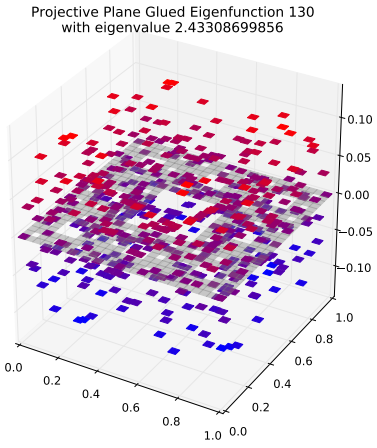


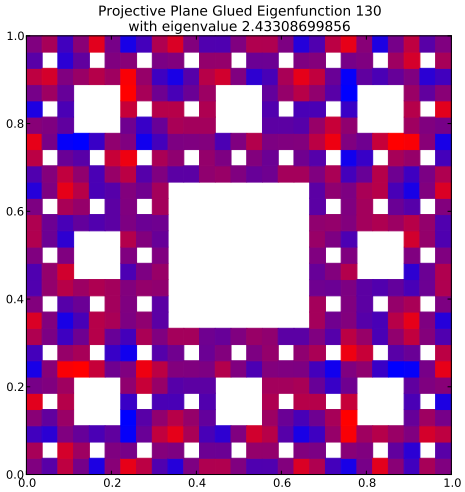


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.456271031518$
Dot Value: 0.3304678113817242

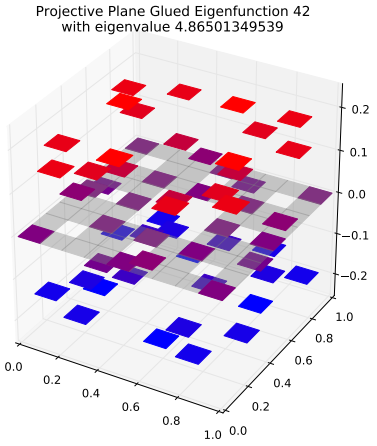
131 $M = 3$ Eigenfunction 130

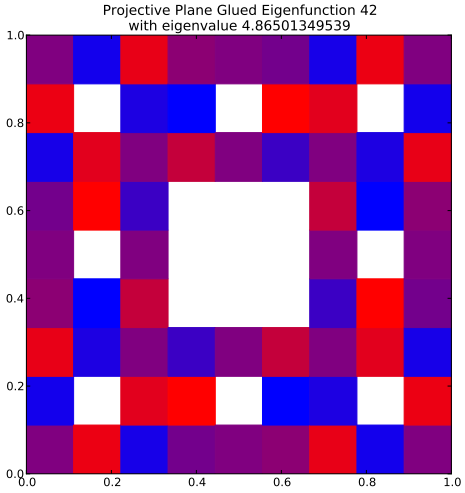
$M = 3$ Eigenfunction 130 has eigenvalue 2.43308699856





Compare to $m = 2$ eigenspace with eigenvalue 4.86501349539

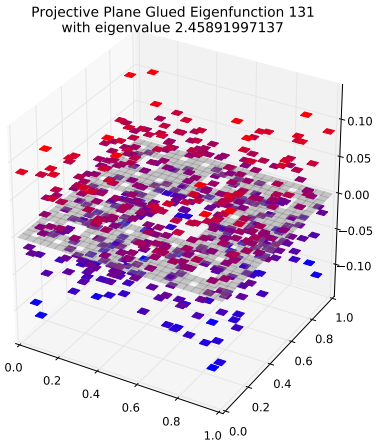


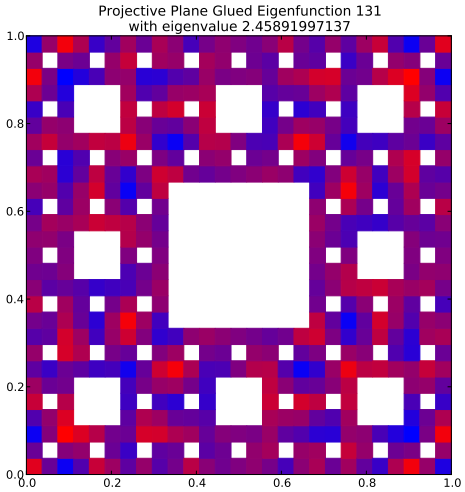


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.500119270145$
Dot Value: 0.10115447488738427

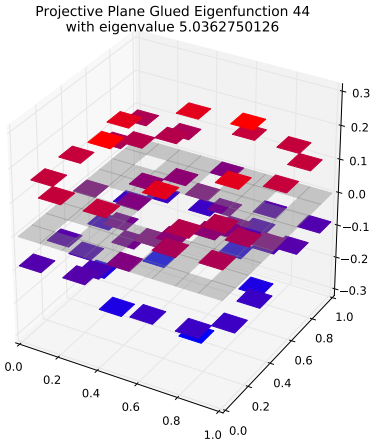
132 $M = 3$ Eigenfunction 131

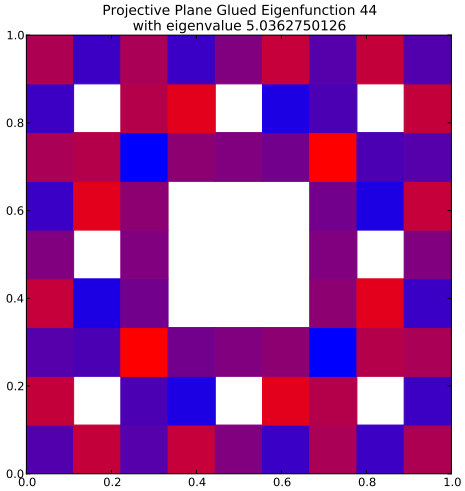
$M = 3$ Eigenfunction 131 has eigenvalue 2.45891997137





Compare to $m = 2$ eigenspace with eigenvalue 5.0362750126

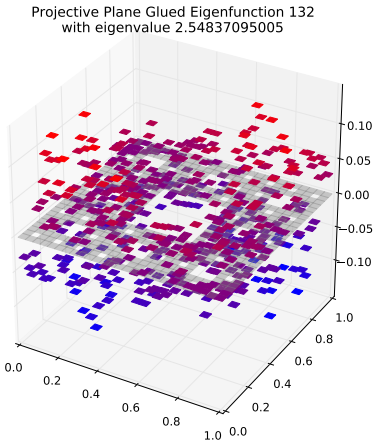


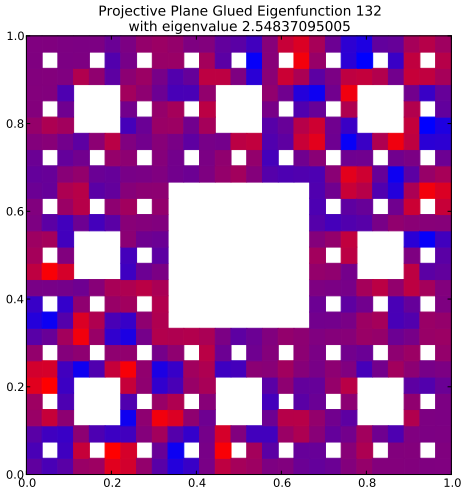


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.488241798793$
Dot Value: 0.3464993092115435

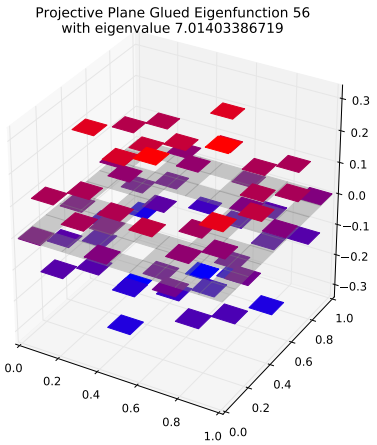
133 $M = 3$ Eigenfunction 132

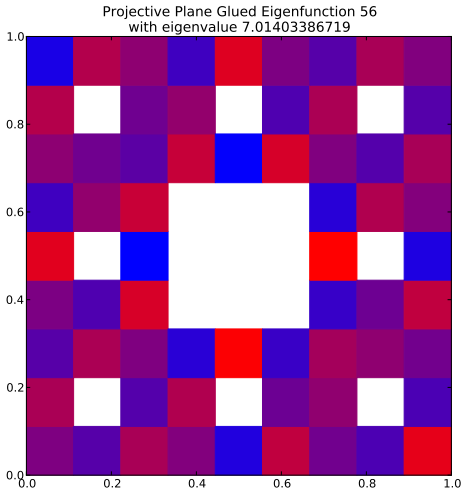
$M = 3$ Eigenfunction 132 has eigenvalue 2.54837095005





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

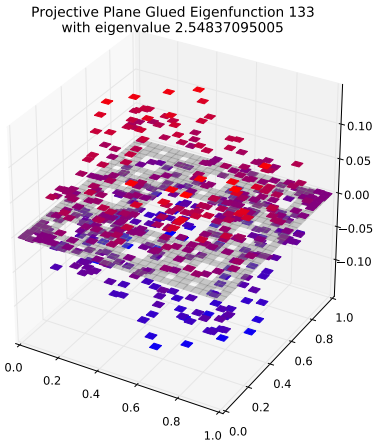


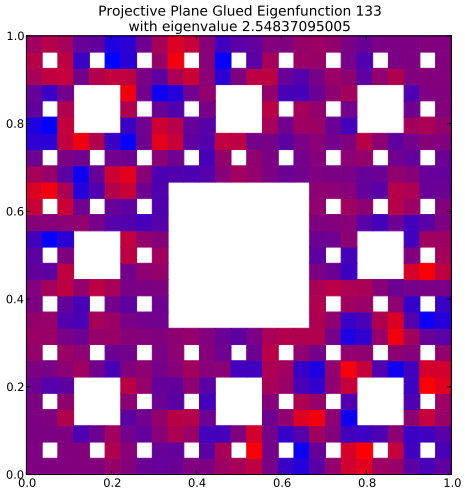


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.363324585866$
Dot Value: 0.1560090006047059

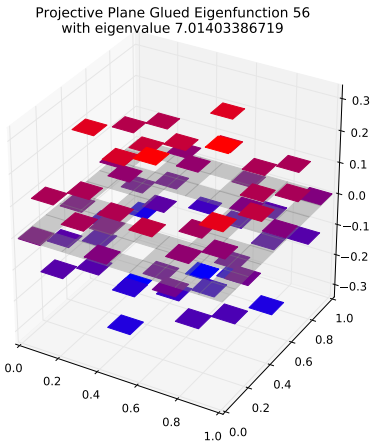
134 $M = 3$ Eigenfunction 133

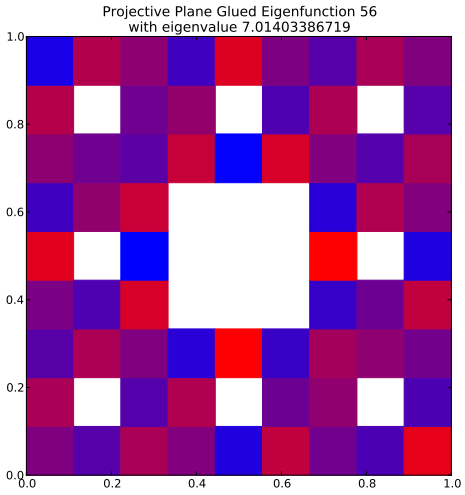
$M = 3$ Eigenfunction 133 has eigenvalue 2.54837095005





Compare to $m = 2$ eigenspace with eigenvalue 7.01403386719
(Note: Eigenspace Dimension > 1)

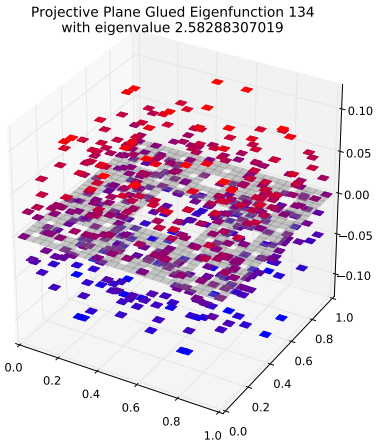


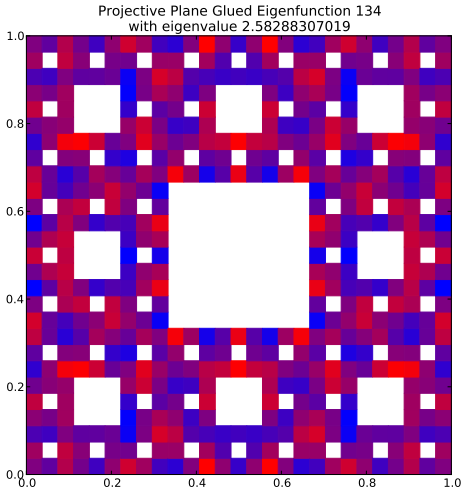


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.363324585866$
Dot Value: 0.1560090006047079

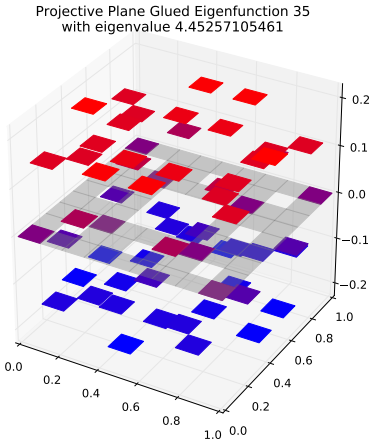
135 $M = 3$ Eigenfunction 134

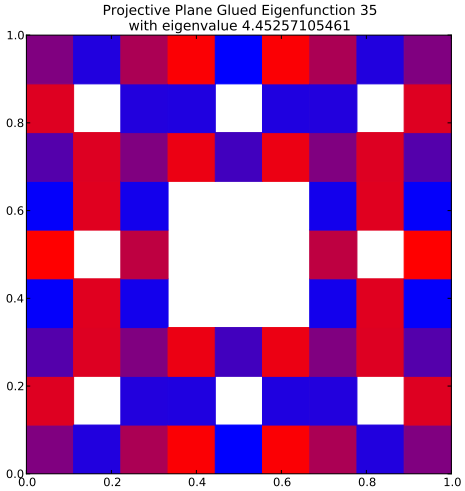
$M = 3$ Eigenfunction 134 has eigenvalue 2.58288307019





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

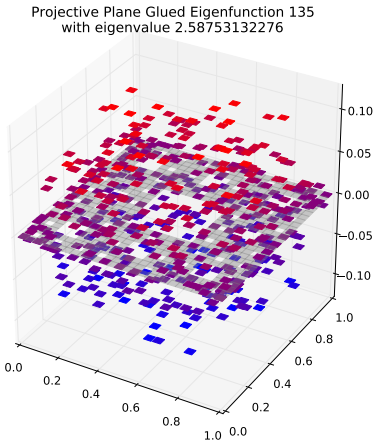


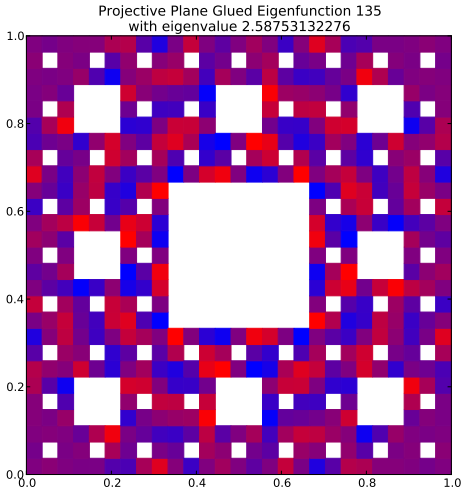


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.580088007247$
Dot Value: 0.3495370617211323

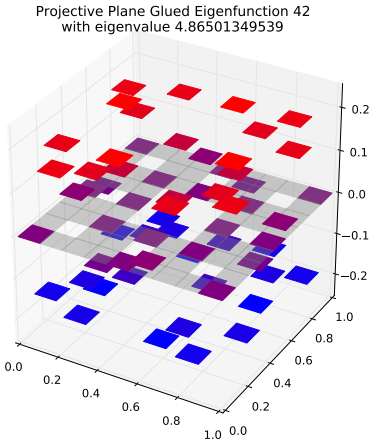
136 $M = 3$ Eigenfunction 135

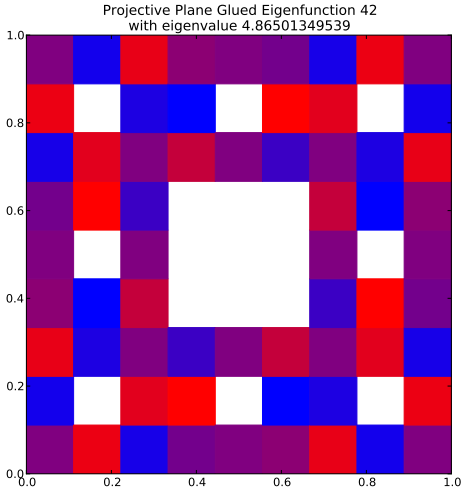
$M = 3$ Eigenfunction 135 has eigenvalue 2.58753132276





Compare to $m = 2$ eigenspace with eigenvalue 4.86501349539

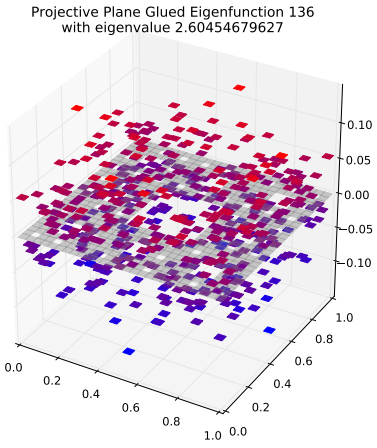


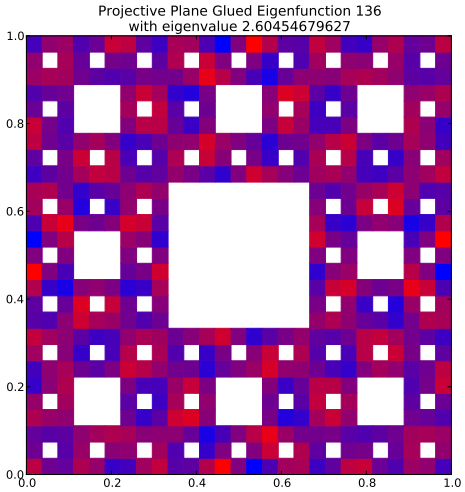


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.531865189113$
Dot Value: 0.37629969537839925

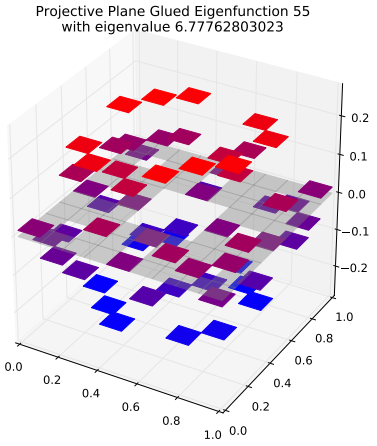
137 $M = 3$ Eigenfunction 136

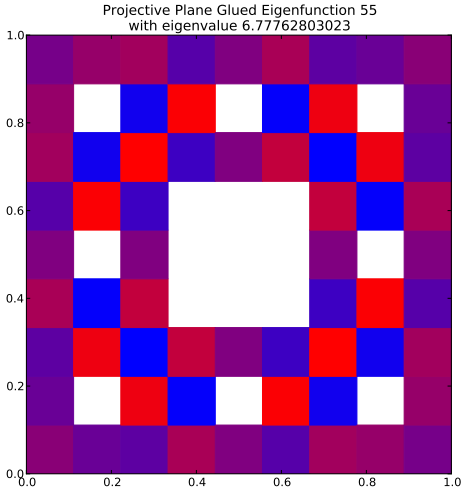
$M = 3$ Eigenfunction 136 has eigenvalue 2.60454679627





Compare to $m = 2$ eigenspace with eigenvalue 6.77762803023

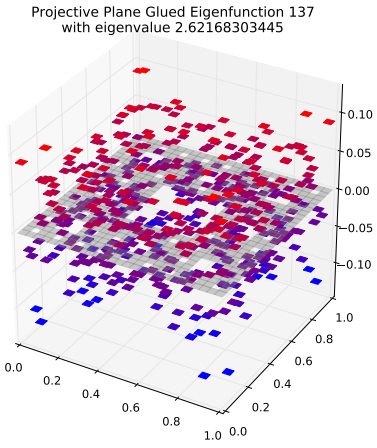


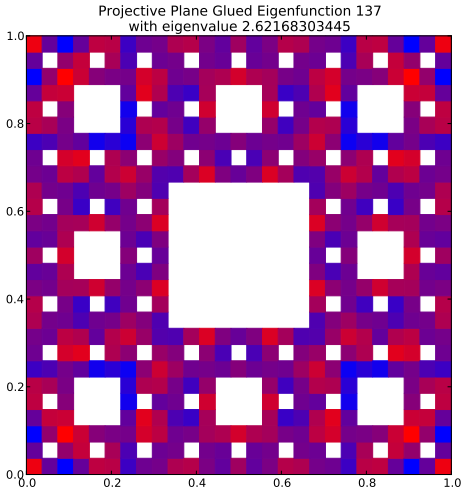


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.384285886545$
Dot Value: 0.03988523435788616

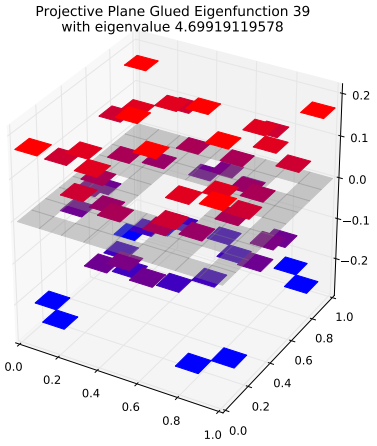
138 $M = 3$ Eigenfunction 137

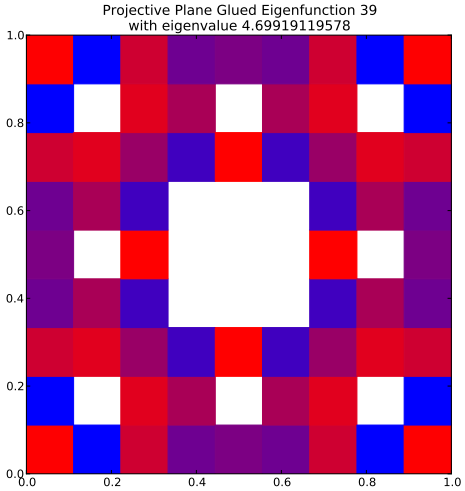
$M = 3$ Eigenfunction 137 has eigenvalue 2.62168303445





Compare to $m = 2$ eigenspace with eigenvalue 4.69919119578

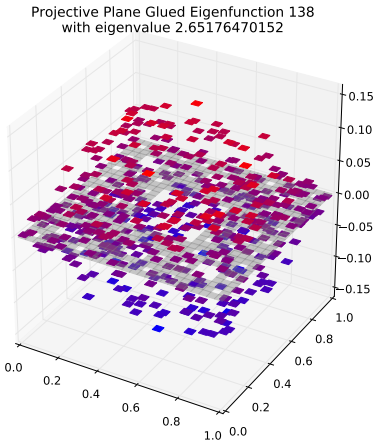


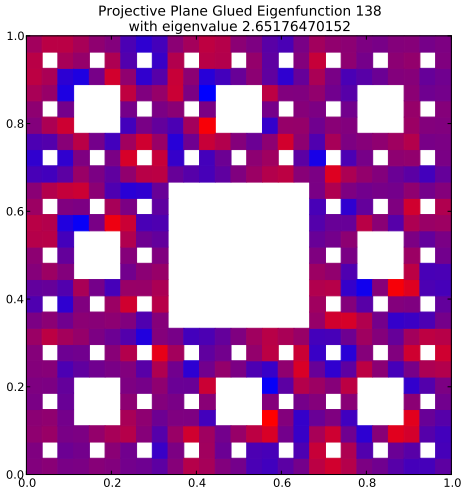


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.557900907884$
Dot Value: 0.09630369421987162

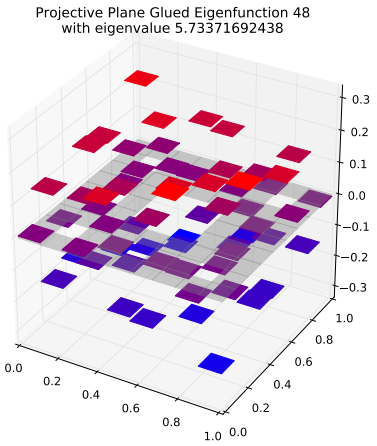
139 $M = 3$ Eigenfunction 138

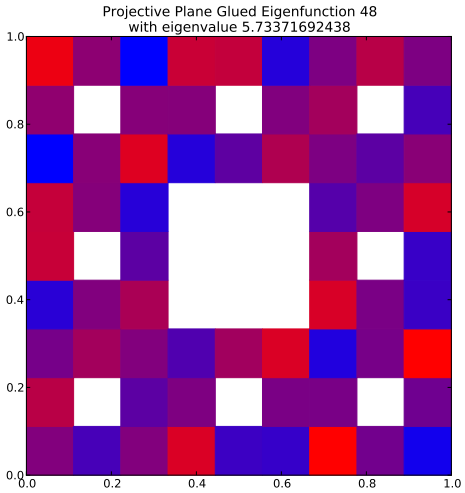
$M = 3$ Eigenfunction 138 has eigenvalue 2.65176470152





Compare to $m = 2$ eigenspace with eigenvalue 5.73371692438
(Note: Eigenspace Dimension > 1)

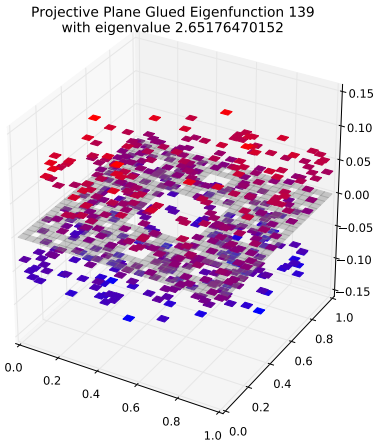


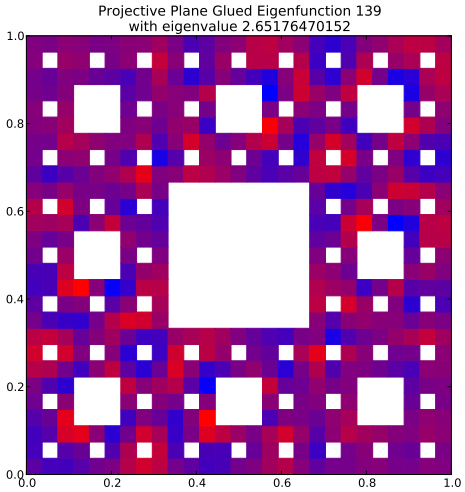


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.462486156274$
Dot Value: 0.1423564162680755

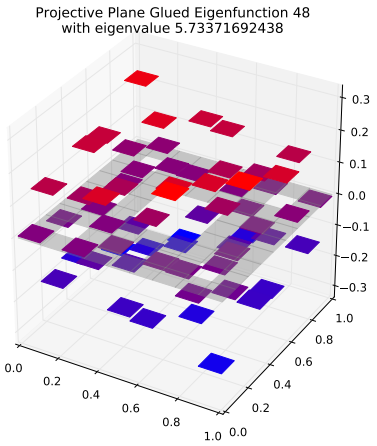
140 $M = 3$ Eigenfunction 139

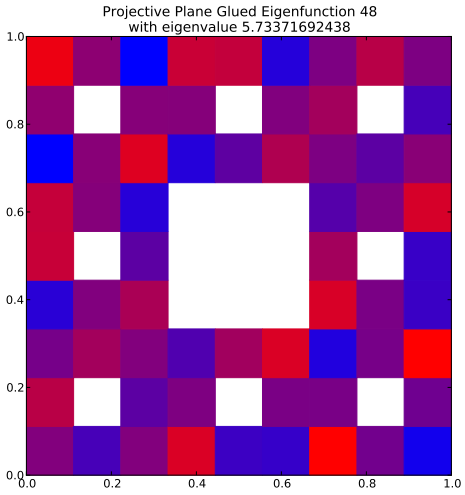
$M = 3$ Eigenfunction 139 has eigenvalue 2.65176470152





Compare to $m = 2$ eigenspace with eigenvalue 5.73371692438
(Note: Eigenspace Dimension > 1)

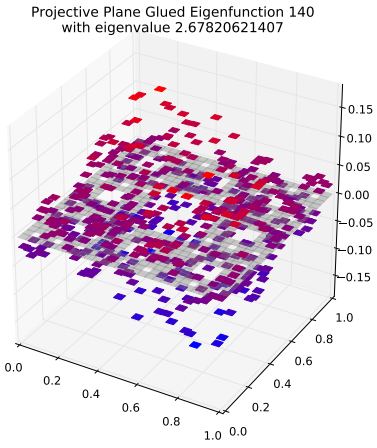


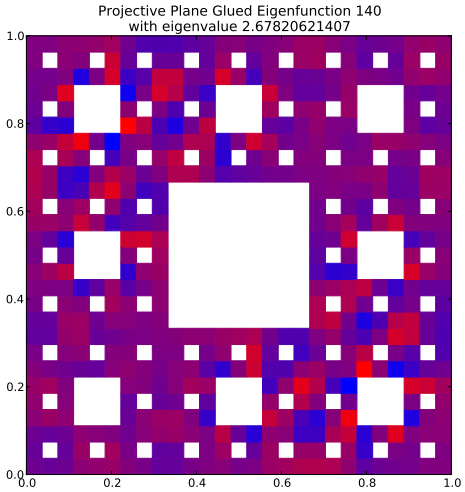


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.462486156274$
Dot Value: 0.1423564162680837

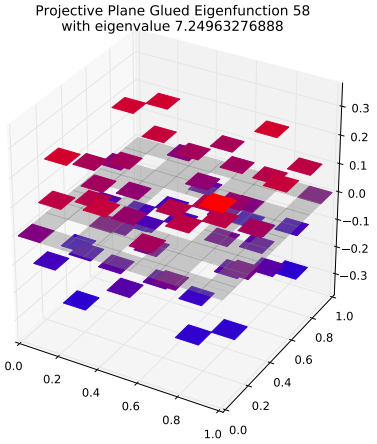
141 $M = 3$ Eigenfunction 140

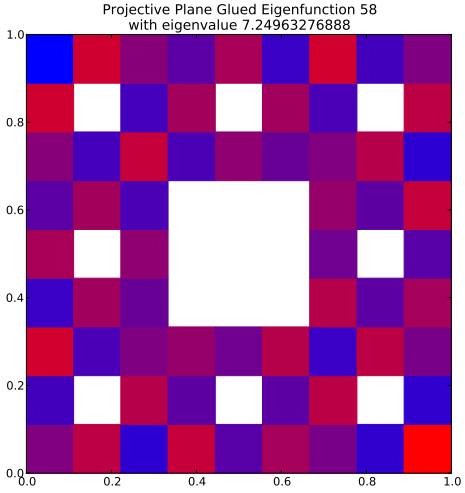
$M = 3$ Eigenfunction 140 has eigenvalue 2.67820621407





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

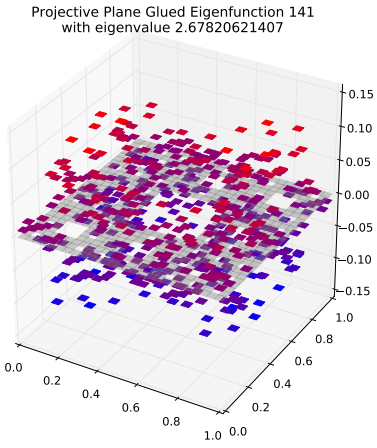


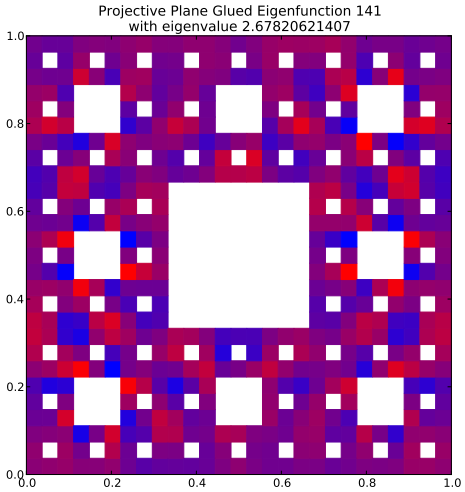


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.369426466063$
Dot Value: 0.47270830302271405

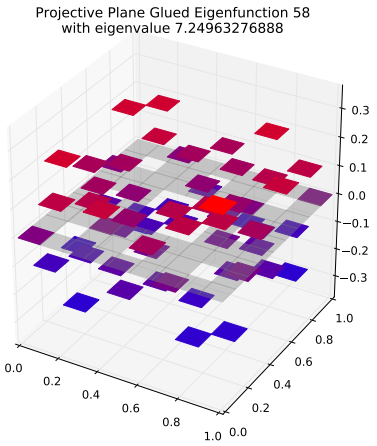
142 $M = 3$ Eigenfunction 141

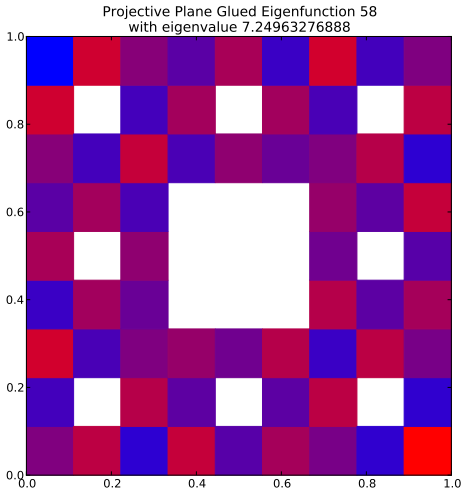
$M = 3$ Eigenfunction 141 has eigenvalue 2.67820621407





Compare to $m = 2$ eigenspace with eigenvalue 7.24963276888
(Note: Eigenspace Dimension > 1)

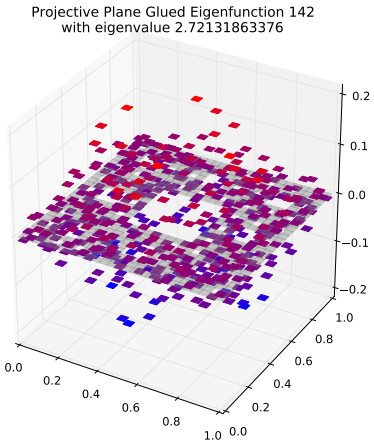


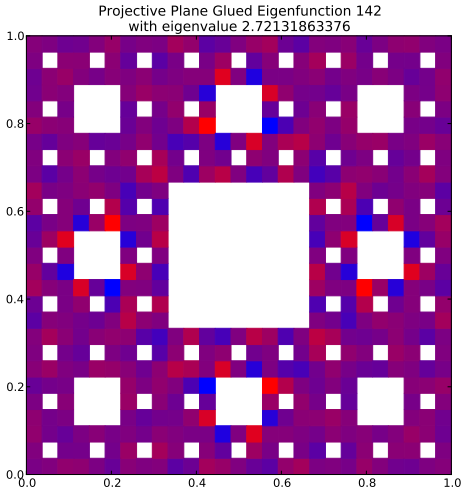


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.369426466063$
Dot Value: 0.47270830302297395

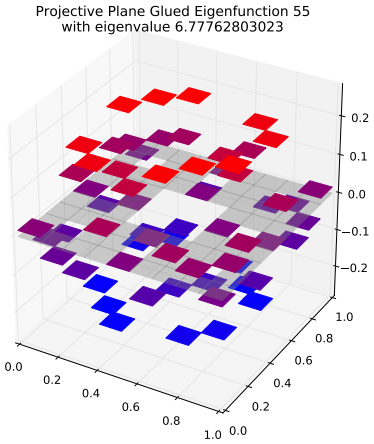
143 $M = 3$ Eigenfunction 142

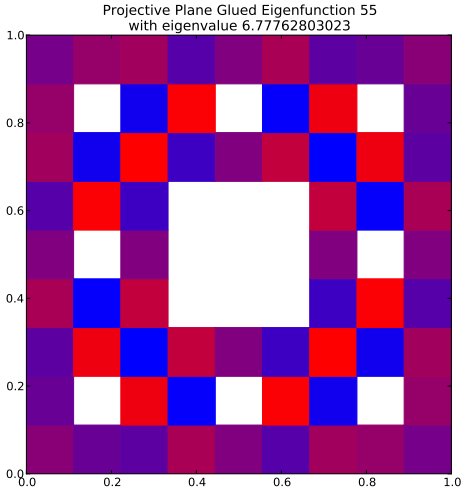
$M = 3$ Eigenfunction 142 has eigenvalue 2.72131863376





Compare to $m = 2$ eigenspace with eigenvalue 6.77762803023

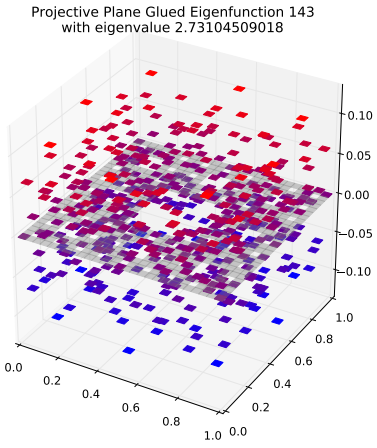


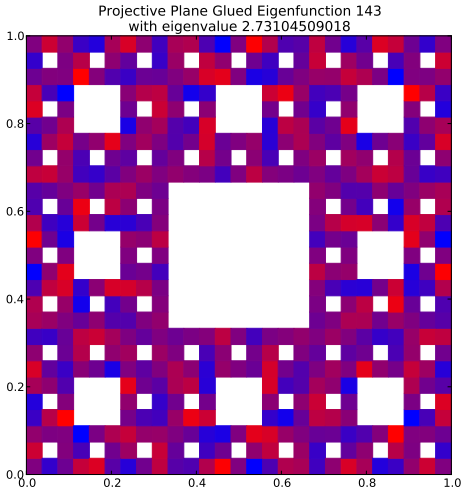


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.401514898963$
Dot Value: 0.28510868419131663

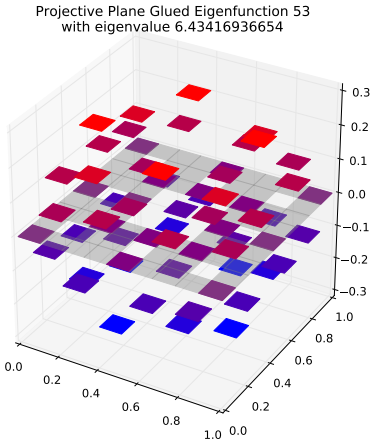
144 $M = 3$ Eigenfunction 143

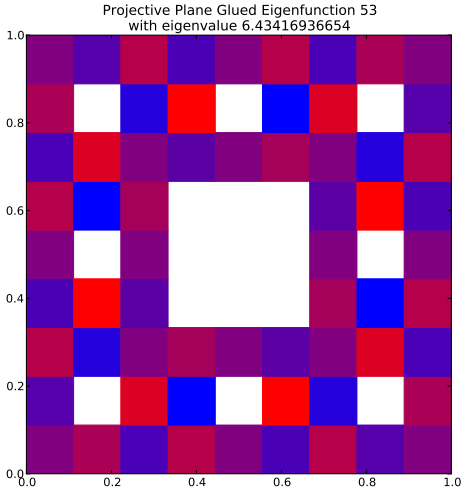
$M = 3$ Eigenfunction 143 has eigenvalue 2.73104509018





Compare to $m = 2$ eigenspace with eigenvalue 6.43416936654

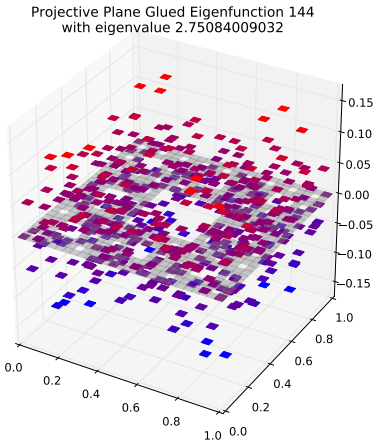


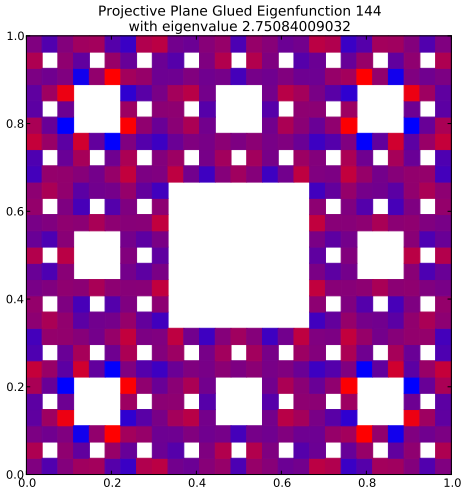


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.424459620908$
Dot Value: 0.10712408036477084

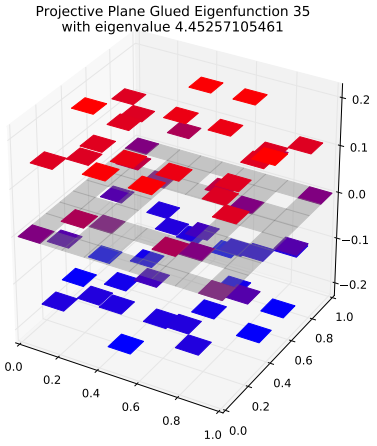
145 $M = 3$ Eigenfunction 144

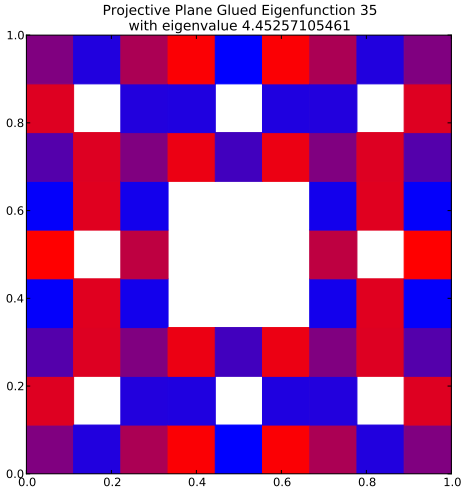
$M = 3$ Eigenfunction 144 has eigenvalue 2.75084009032





Compare to $m = 2$ eigenspace with eigenvalue 4.45257105461

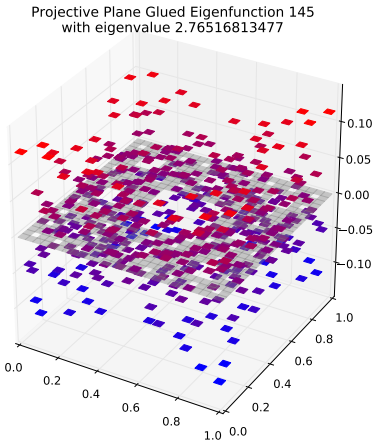


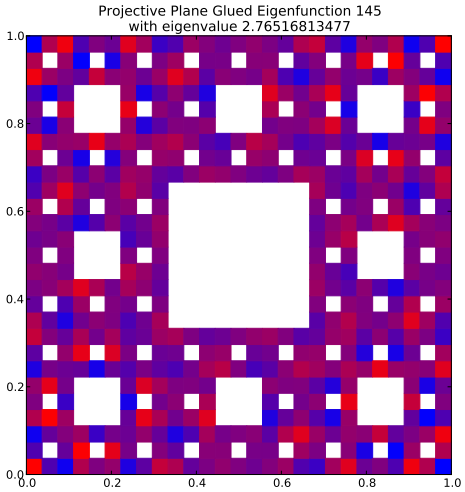


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.617809363755$
Dot Value: 0.231401427075823 67

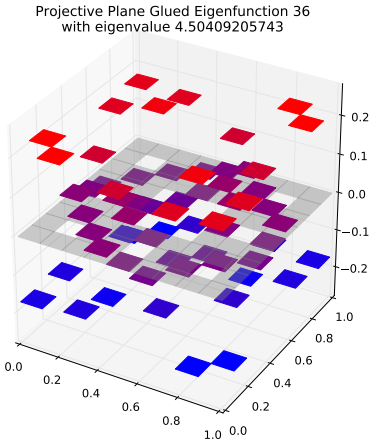
146 $M = 3$ Eigenfunction 145

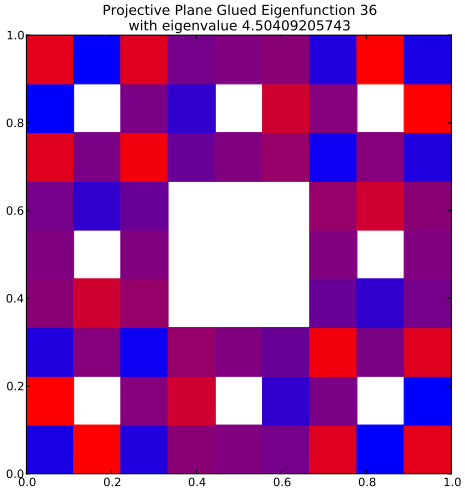
$M = 3$ Eigenfunction 145 has eigenvalue 2.76516813477





Compare to $m = 2$ eigenspace with eigenvalue 4.50409205743

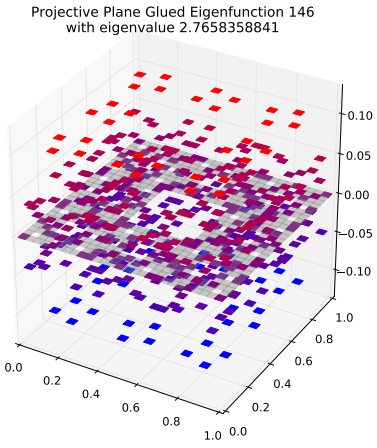


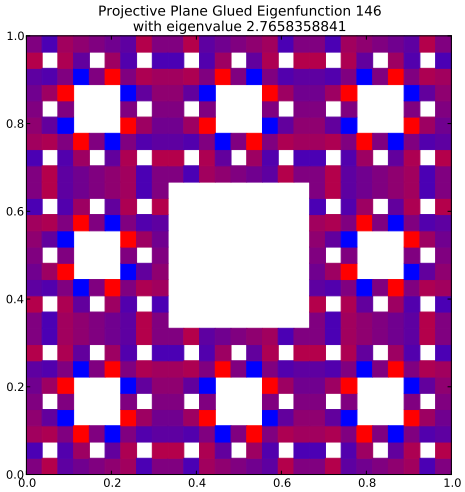


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.613923538753$
Dot Value: 0.1418919065690848

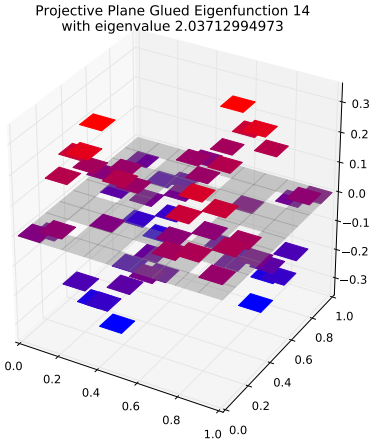
147 $M = 3$ Eigenfunction 146

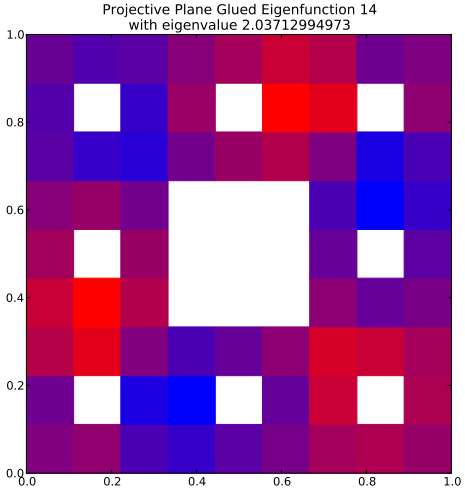
$M = 3$ Eigenfunction 146 has eigenvalue 2.7658358841





Compare to $m = 2$ eigenspace with eigenvalue 2.03712994973
(Note: Eigenspace Dimension > 1)

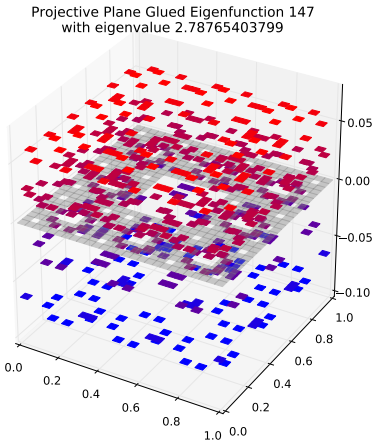


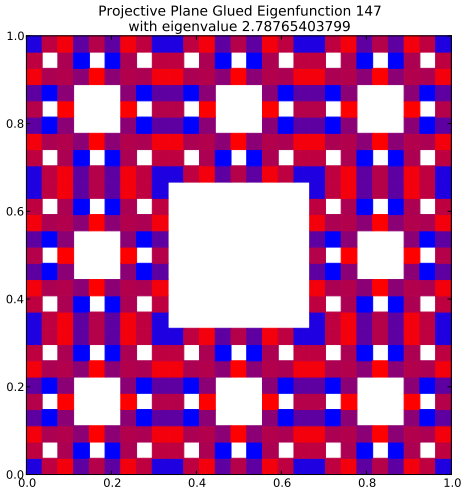


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 1.35771205193$
Dot Value: 2

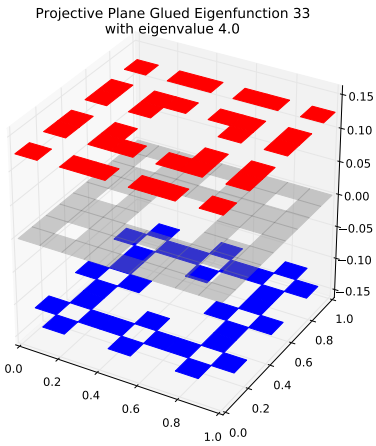
148 $M = 3$ Eigenfunction 147

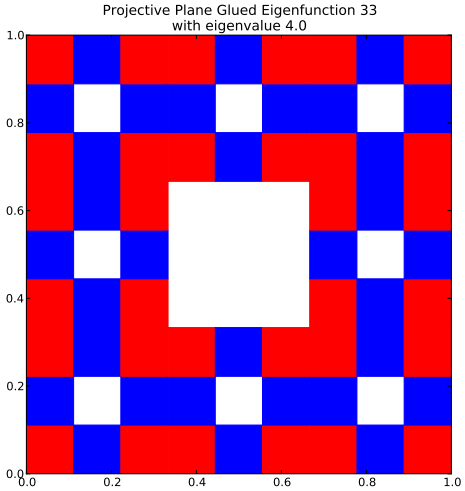
$M = 3$ Eigenfunction 147 has eigenvalue 2.78765403799





Compare to $m = 2$ eigenspace with eigenvalue 4.0

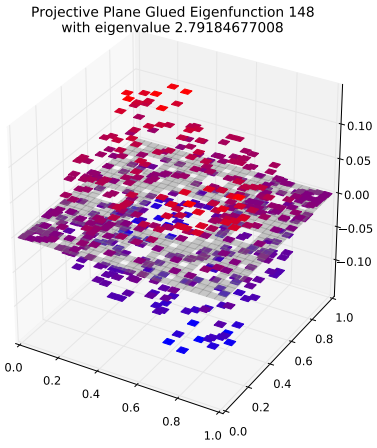


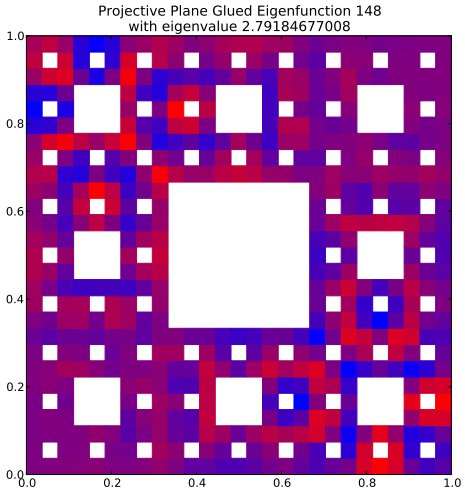


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.696913509497$
Dot Value: 0.0

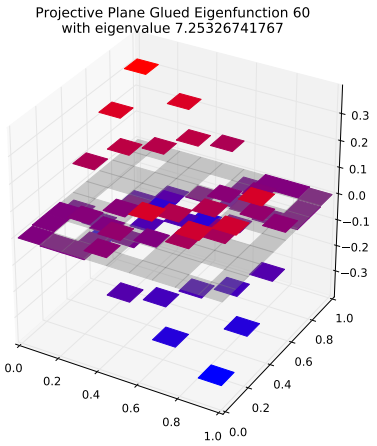
149 $M = 3$ Eigenfunction 148

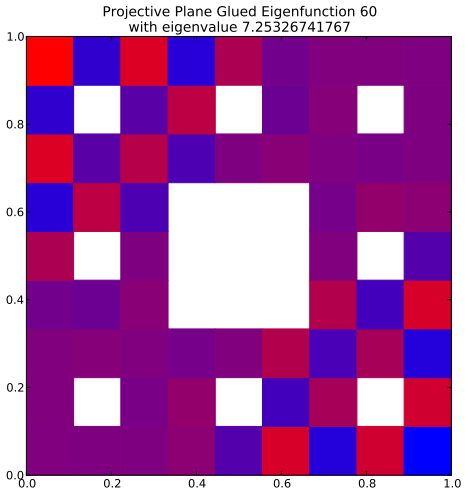
$M = 3$ Eigenfunction 148 has eigenvalue 2.79184677008





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)

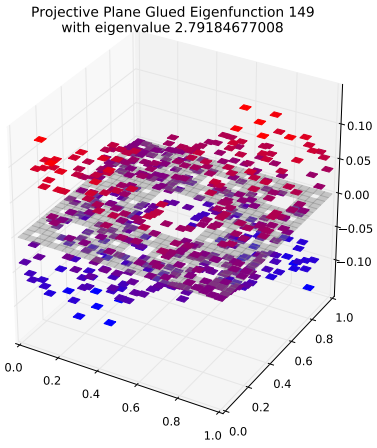


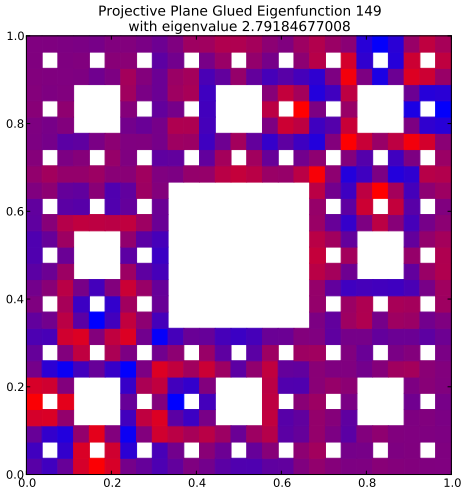


Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.384908843052$
Dot Value: 0.18627874251696963

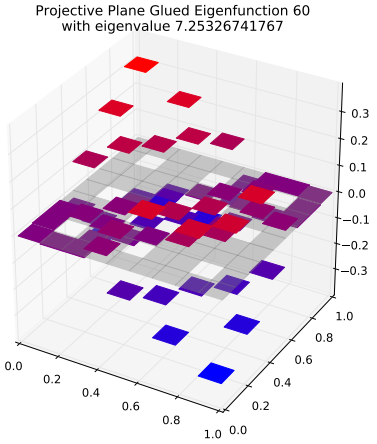
150 $M = 3$ Eigenfunction 149

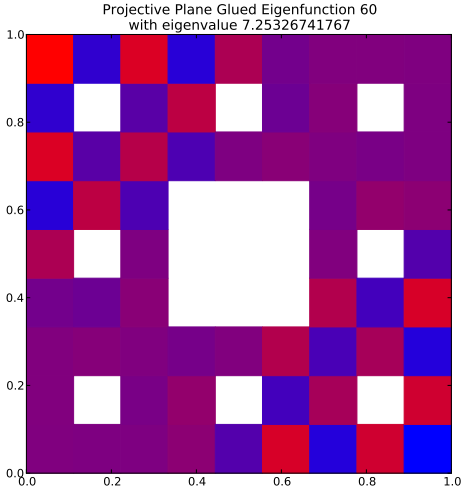
$M = 3$ Eigenfunction 149 has eigenvalue 2.79184677008





Compare to $m = 2$ eigenspace with eigenvalue 7.25326741767
(Note: Eigenspace Dimension > 1)





Eigenvalue Ratio: $\lambda_3/\lambda_2 = 0.384908843052$
Dot Value: 0.1862787425170419