

Projective Plane Glued Eigenfunctions of the Graph Laplacian for $M = 2$

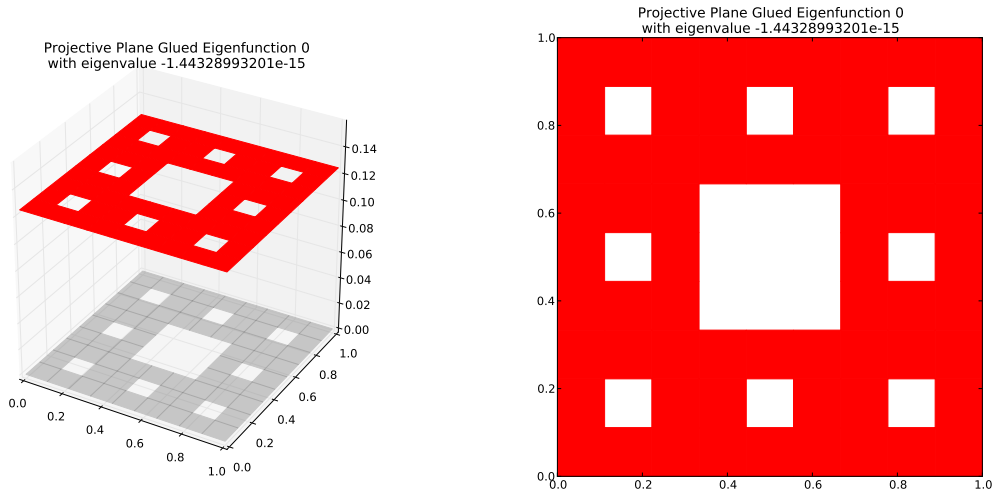
SPUR 2016

August 12, 2016

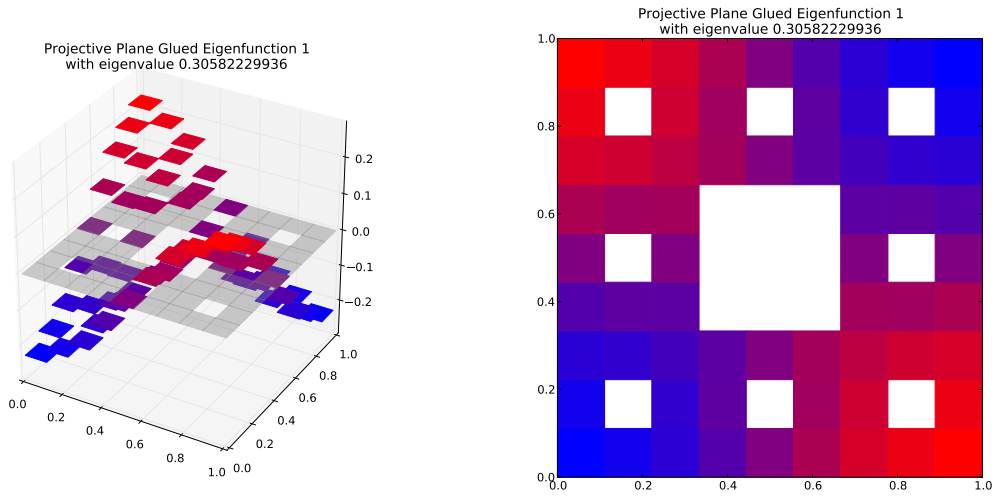
Eigenvalues:

0. -1.44328993201e-15	22. 3.16946673704	44. 5.0362750126
1. 0.30582229936	23. 3.16946673704	45. 5.24180676624
2. 0.441021780966	24. 3.23477240994	46. 5.24180676624
3. 0.758799842469	25. 3.45878340901	47. 5.28160345322
4. 1.12507512074	26. 3.51128162693	48. 5.73371692438
5. 1.12507512074	27. 3.51128162693	49. 5.73371692438
6. 1.33249876329	28. 3.65098985108	50. 5.94691370594
7. 1.36520368549	29. 3.76733918152	51. 6.09573933235
8. 1.49838811955	30. 3.76733918152	52. 6.09573933235
9. 1.56922273818	31. 3.96932301514	53. 6.43416936654
10. 1.87462446692	32. 3.96932301514	54. 6.44874903299
11. 2.0	33. 4.0	55. 6.77762803023
12. 2.0	34. 4.12889454727	56. 7.01403386719
13. 2.03712994973	35. 4.45257105461	57. 7.01403386719
14. 2.03712994973	36. 4.50409205743	58. 7.24963276888
15. 2.11099415948	37. 4.58578643763	59. 7.24963276888
16. 2.32933565713	38. 4.58578643763	60. 7.25326741767
17. 2.7658358841	39. 4.69919119578	61. 7.25326741767
18. 2.78765403799	40. 4.8423550361	62. 7.41421356237
19. 2.91478928981	41. 4.8423550361	63. 7.41421356237
20. 2.98983225608	42. 4.86501349539	
21. 2.98983225608	43. 5.02616265324	

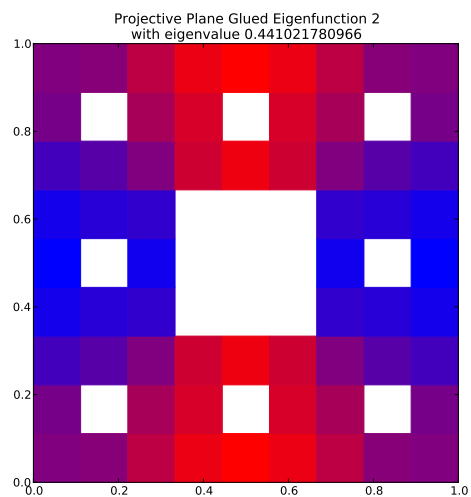
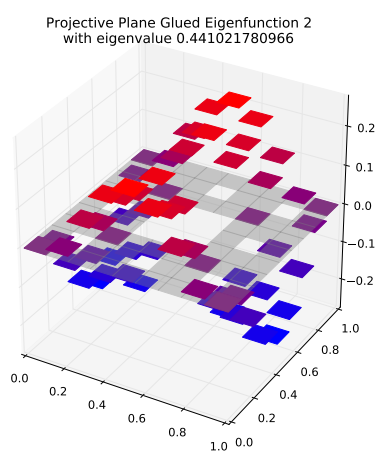
Eigenfunction 0 with eigenvalue $-1.44328993201e-15$



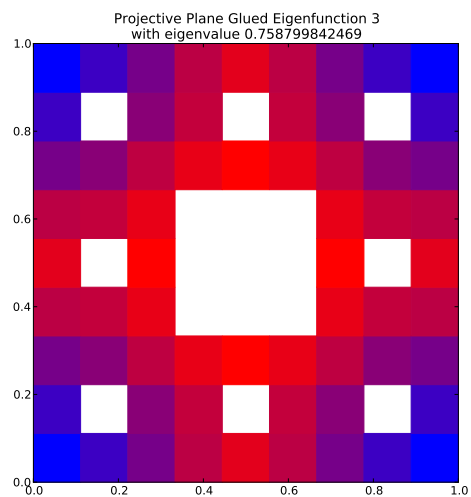
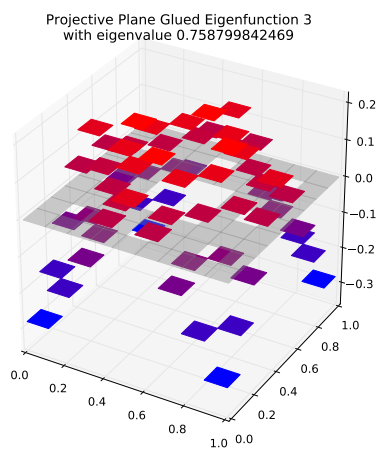
Eigenfunction 1 with eigenvalue 0.30582229936



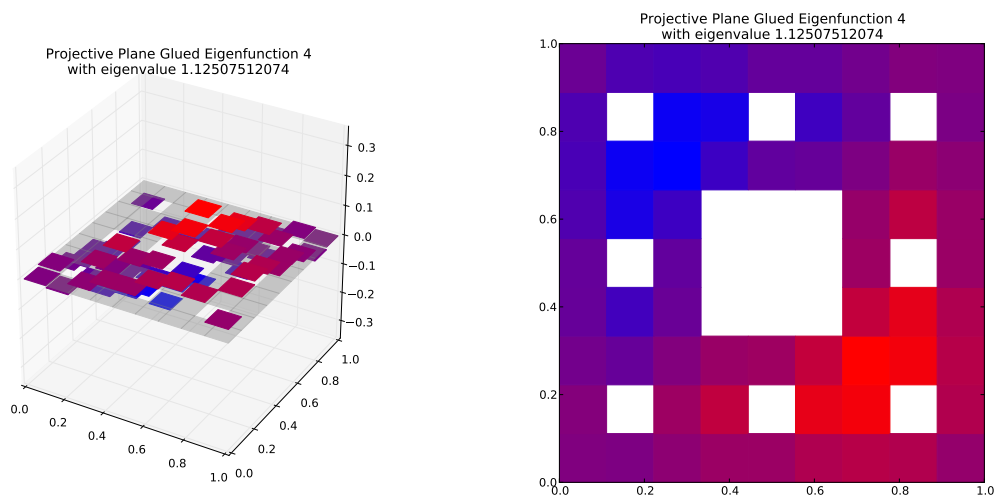
Eigenfunction 2 with eigenvalue 0.441021780966



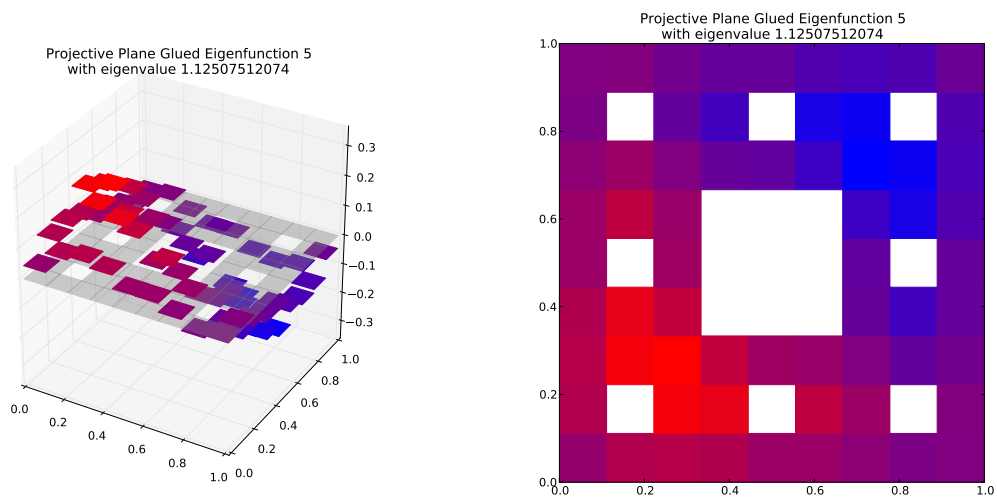
Eigenfunction 3 with eigenvalue 0.758799842469



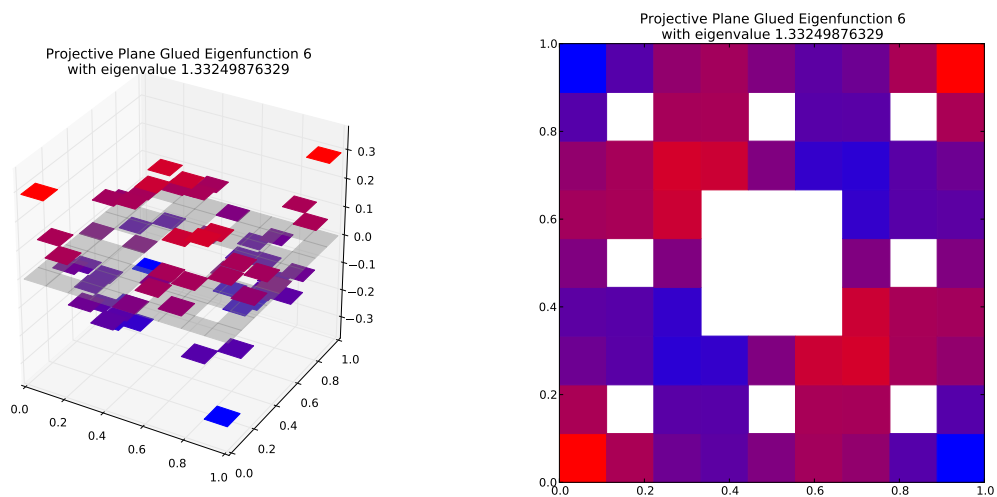
Eigenfunction 4 with eigenvalue 1.12507512074



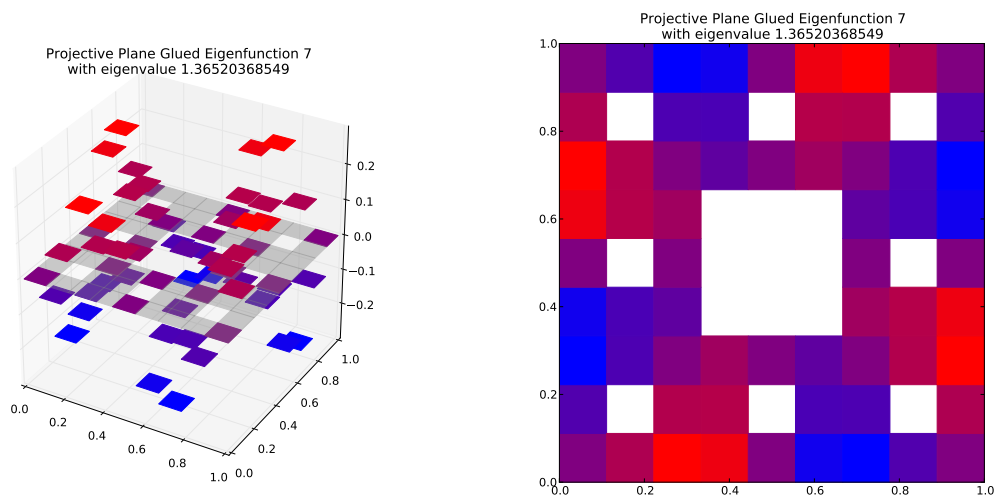
Eigenfunction 5 with eigenvalue 1.12507512074



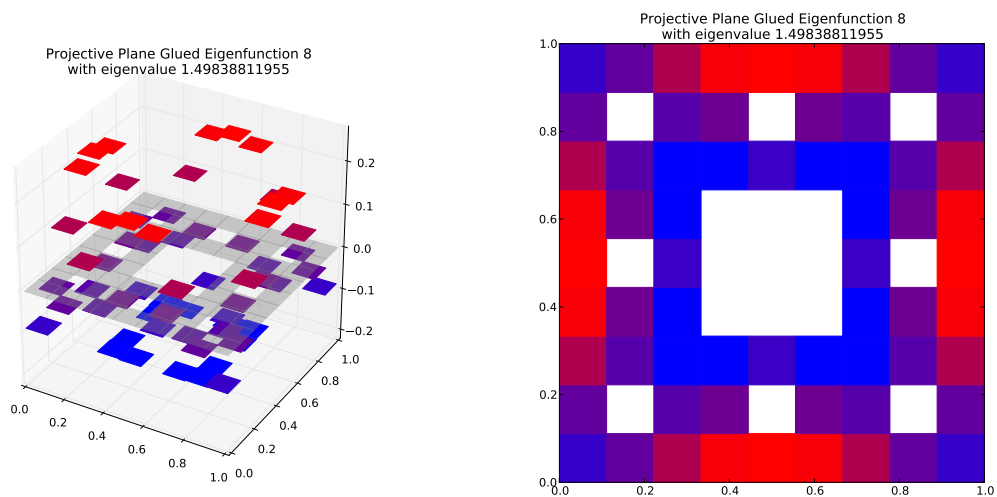
Eigenfunction 6 with eigenvalue 1.33249876329



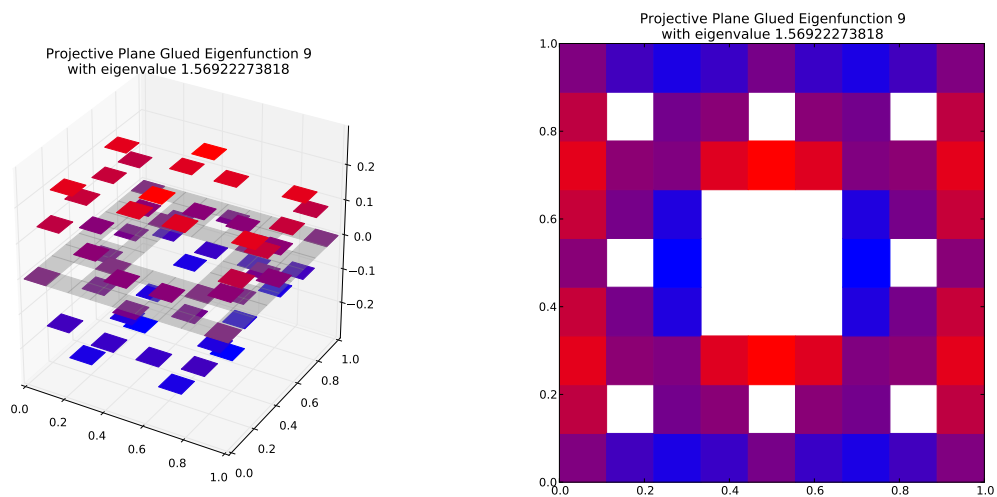
Eigenfunction 7 with eigenvalue 1.36520368549



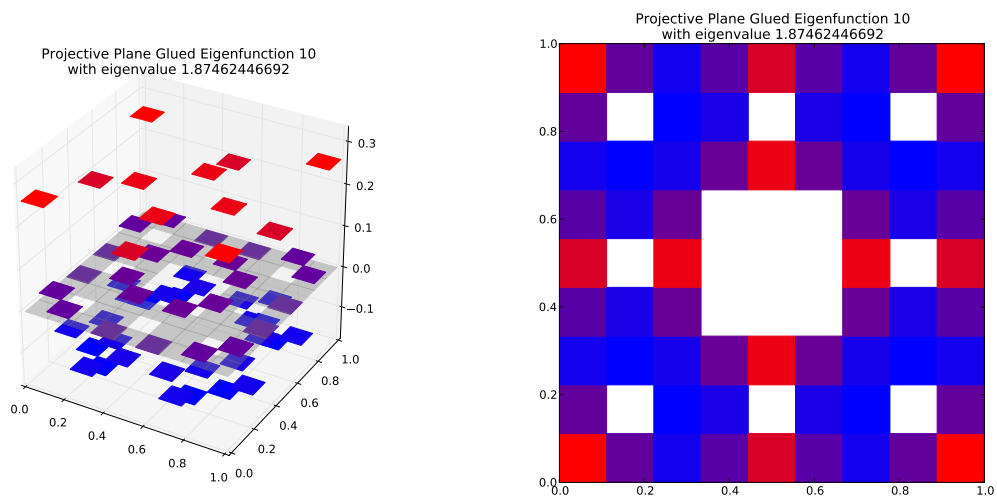
Eigenfunction 8 with eigenvalue 1.49838811955



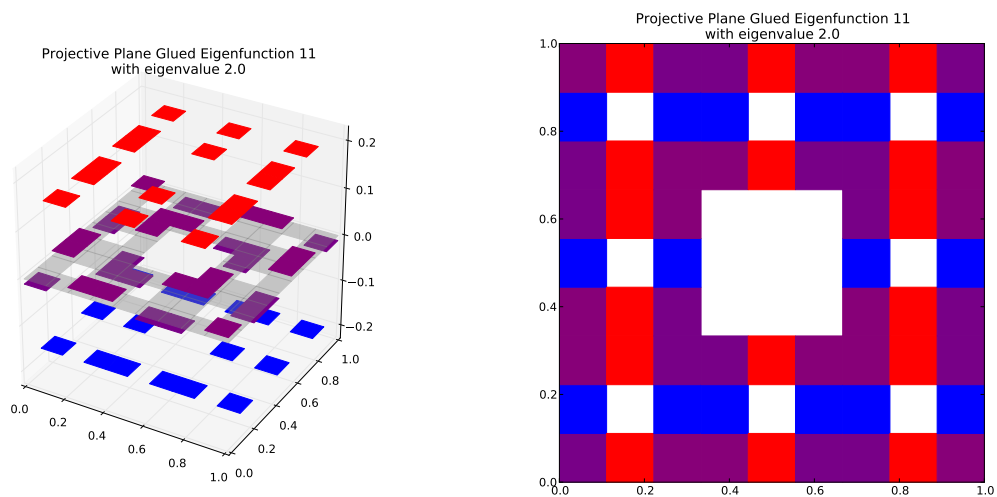
Eigenfunction 9 with eigenvalue 1.56922273818



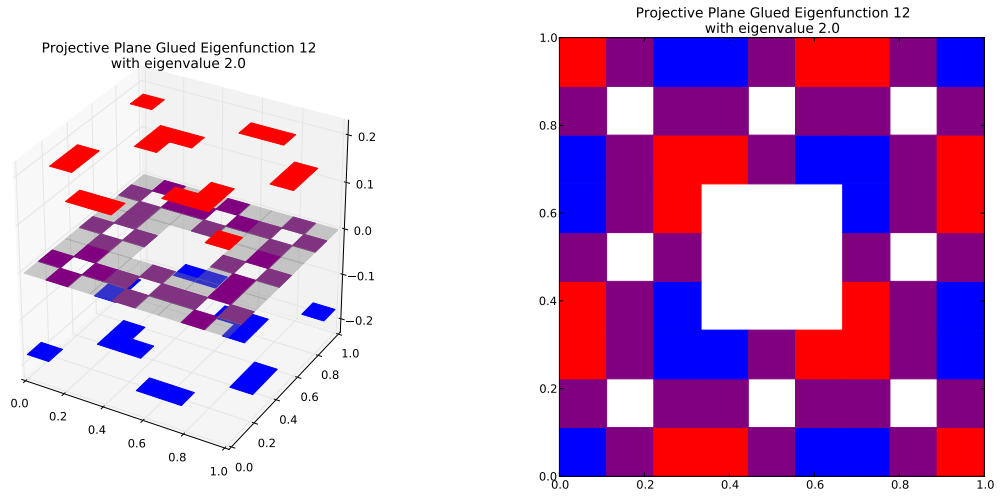
Eigenfunction 10 with eigenvalue 1.87462446692



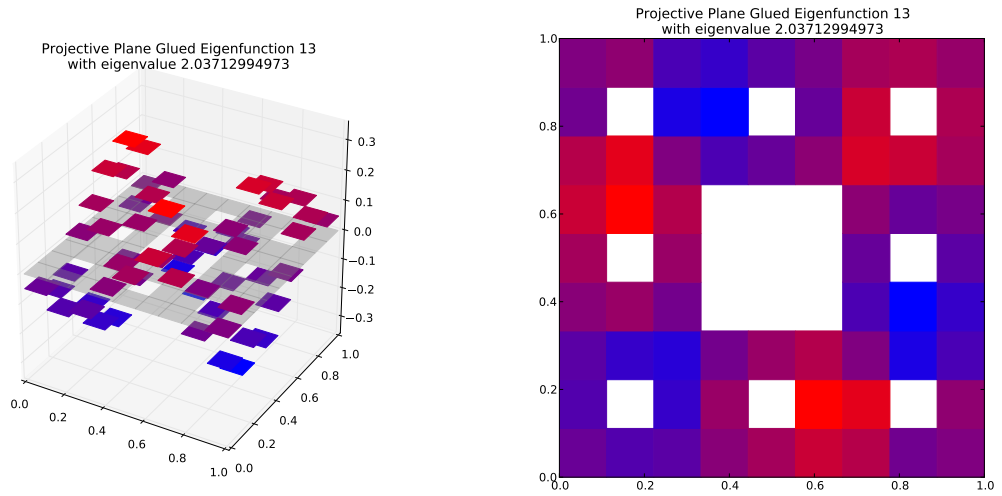
Eigenfunction 11 with eigenvalue 2.0



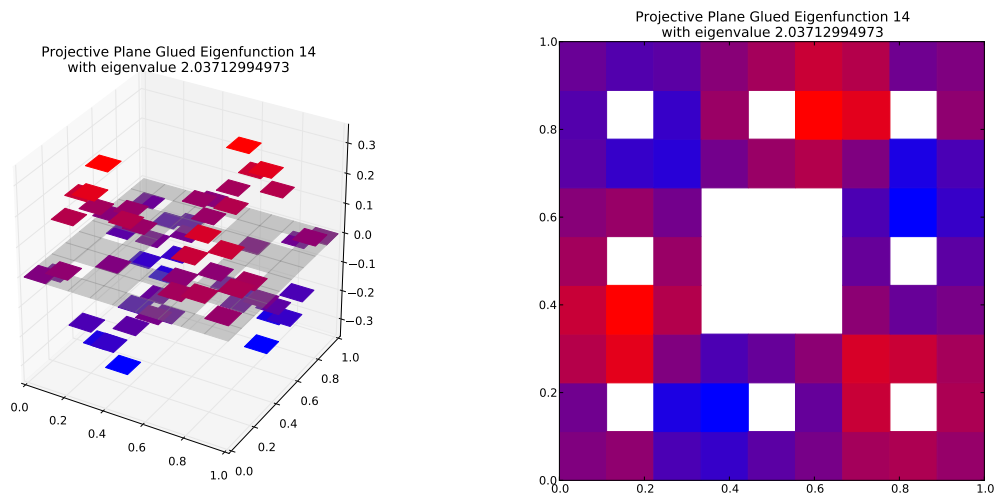
Eigenfunction 12 with eigenvalue 2.0



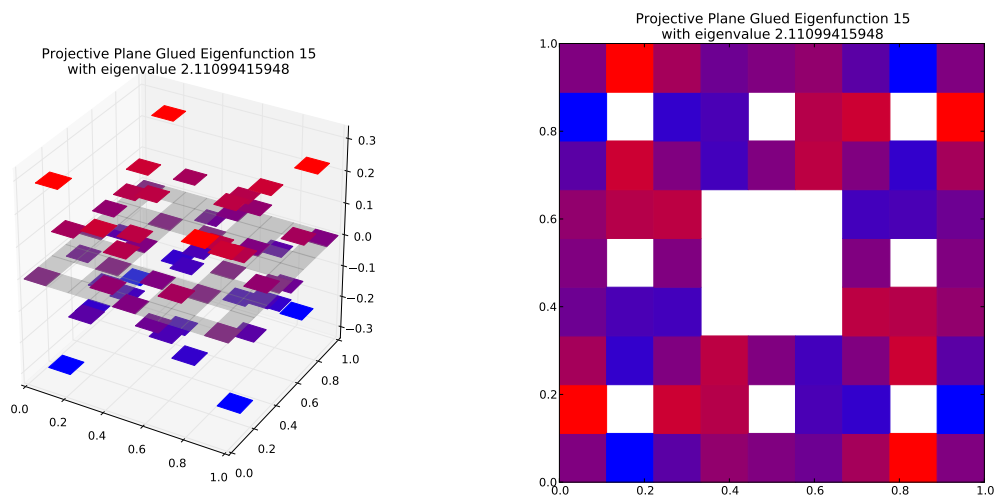
Eigenfunction 13 with eigenvalue 2.03712994973



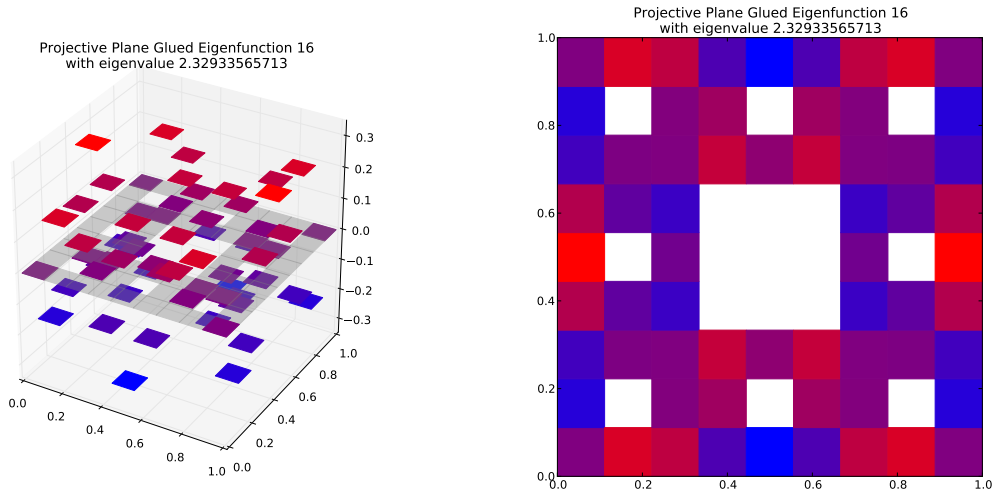
Eigenfunction 14 with eigenvalue 2.03712994973



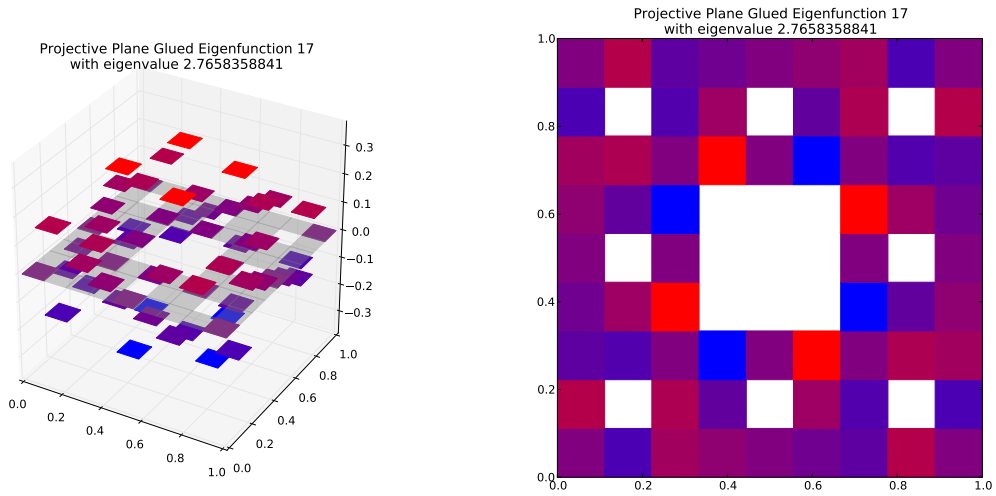
Eigenfunction 15 with eigenvalue 2.11099415948



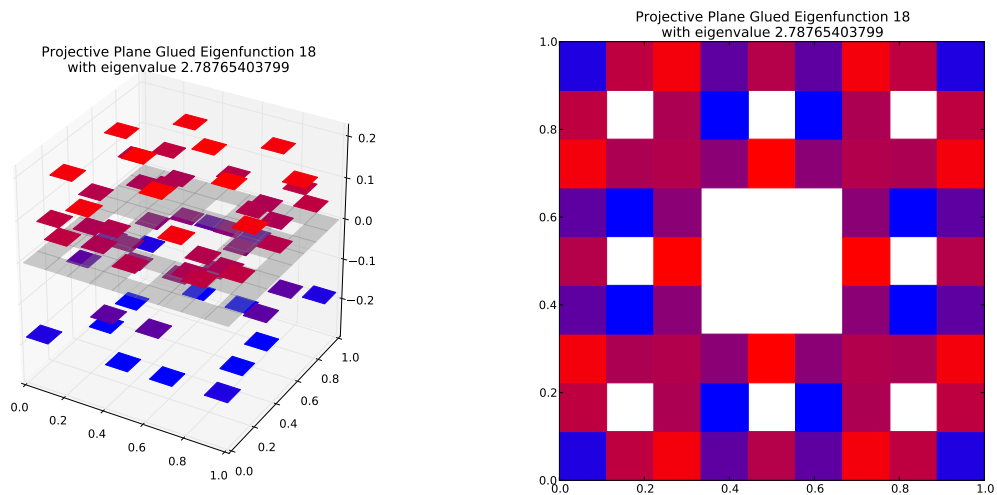
Eigenfunction 16 with eigenvalue 2.32933565713



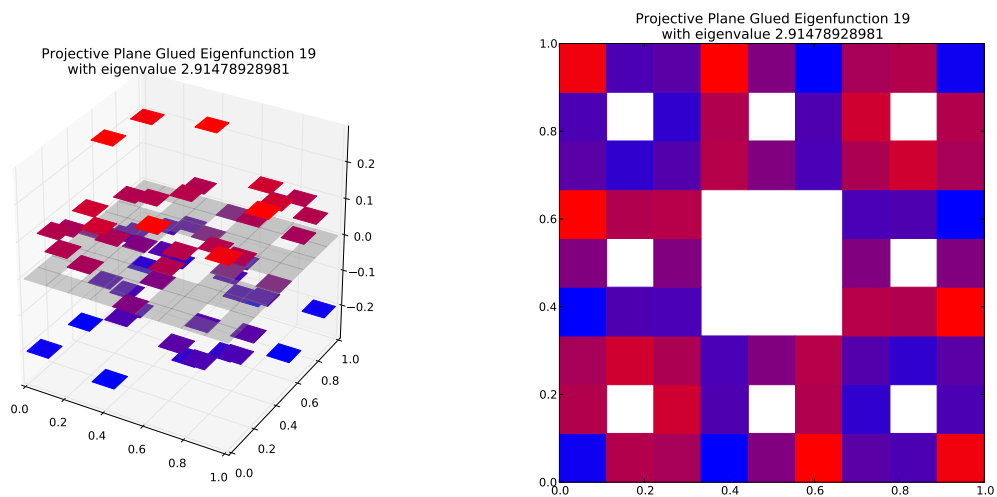
Eigenfunction 17 with eigenvalue 2.7658358841



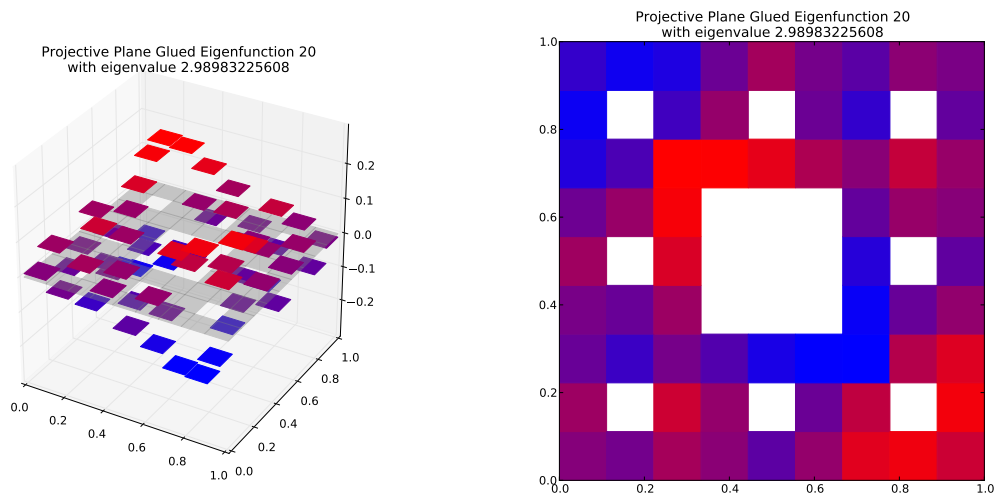
Eigenfunction 18 with eigenvalue 2.78765403799



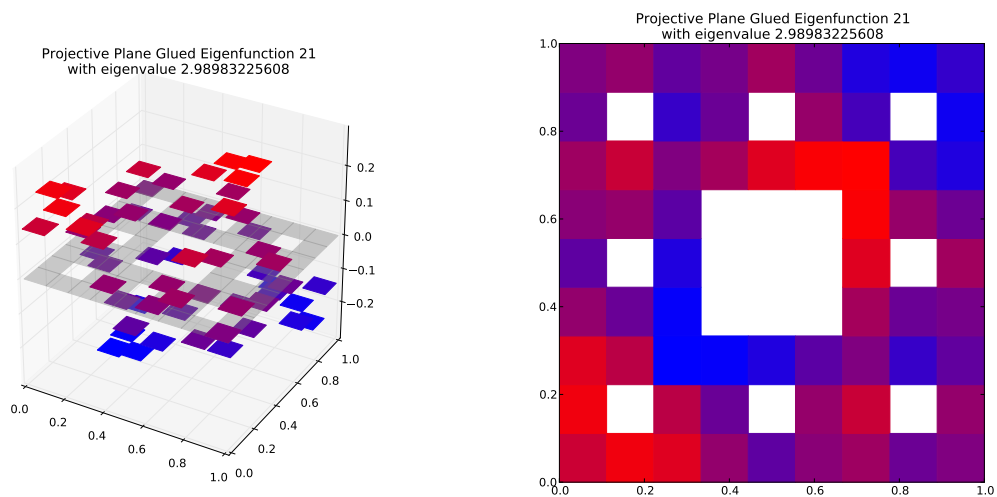
Eigenfunction 19 with eigenvalue 2.91478928981



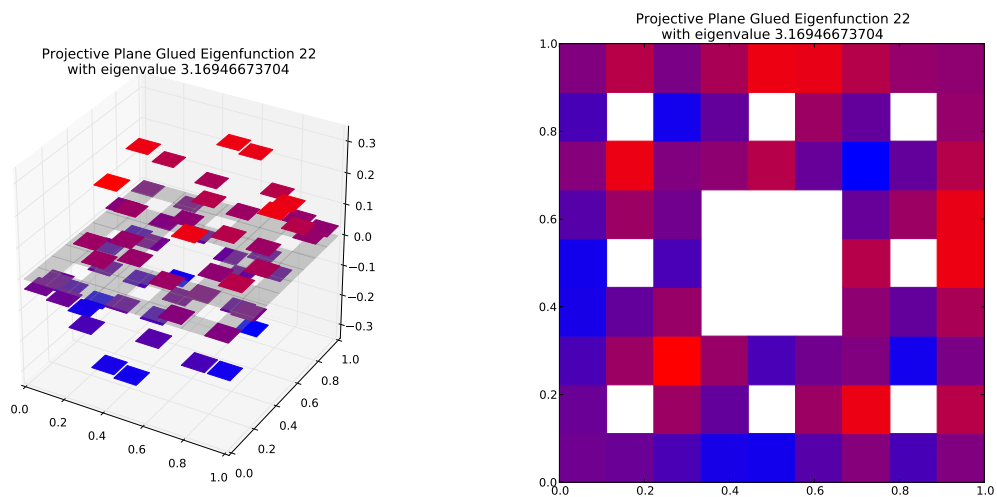
Eigenfunction 20 with eigenvalue 2.98983225608



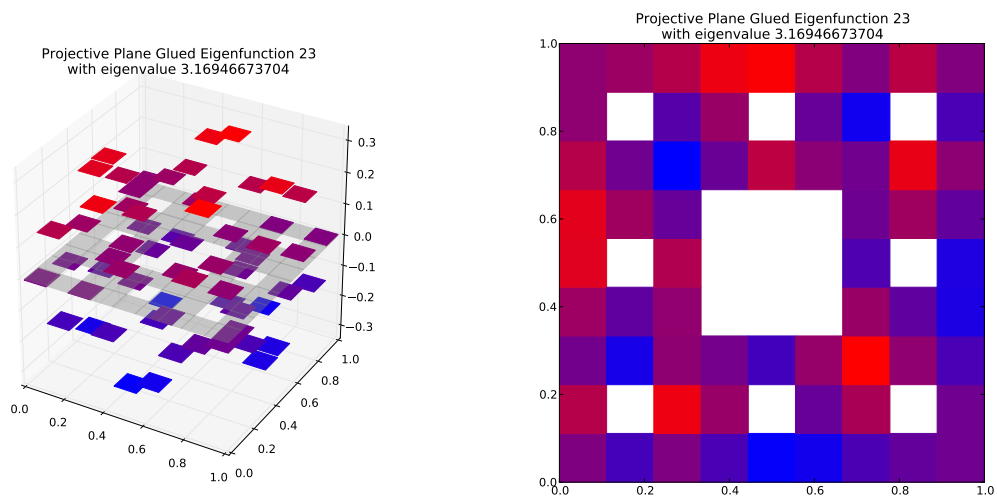
Eigenfunction 21 with eigenvalue 2.98983225608



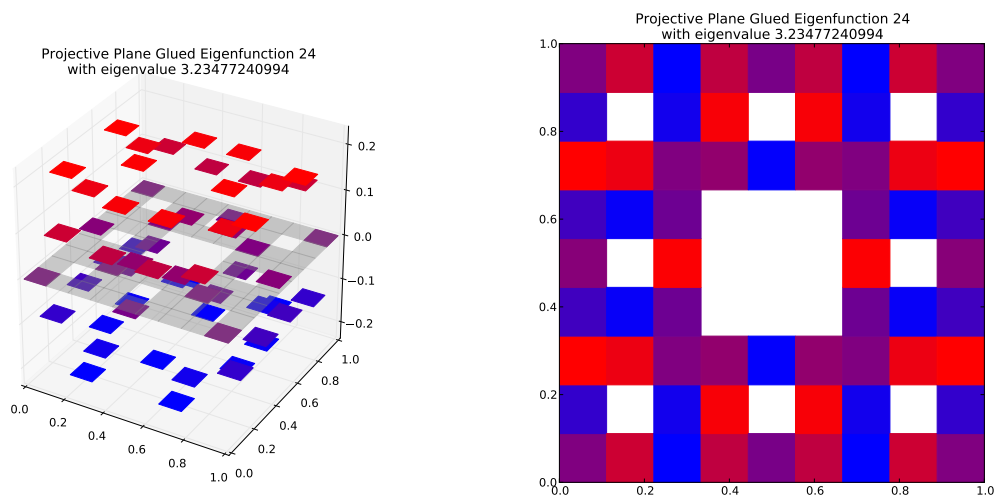
Eigenfunction 22 with eigenvalue 3.16946673704



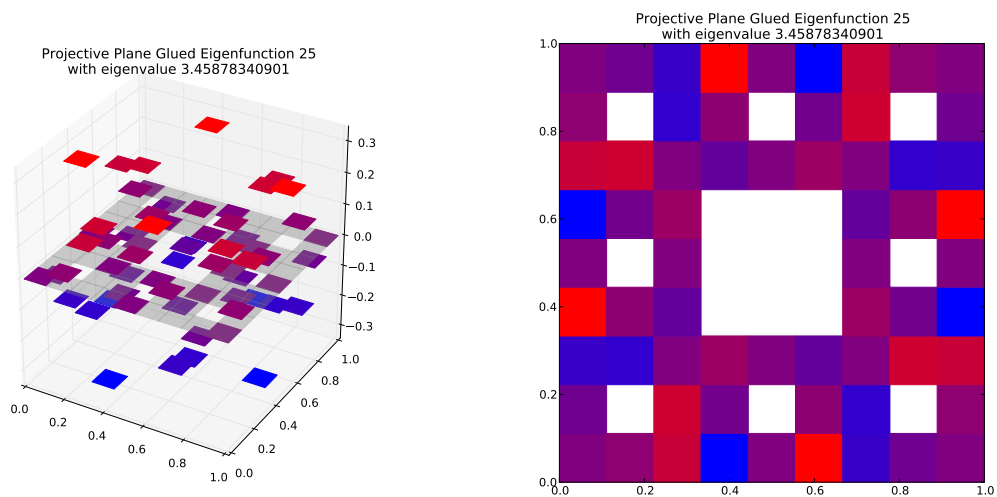
Eigenfunction 23 with eigenvalue 3.16946673704



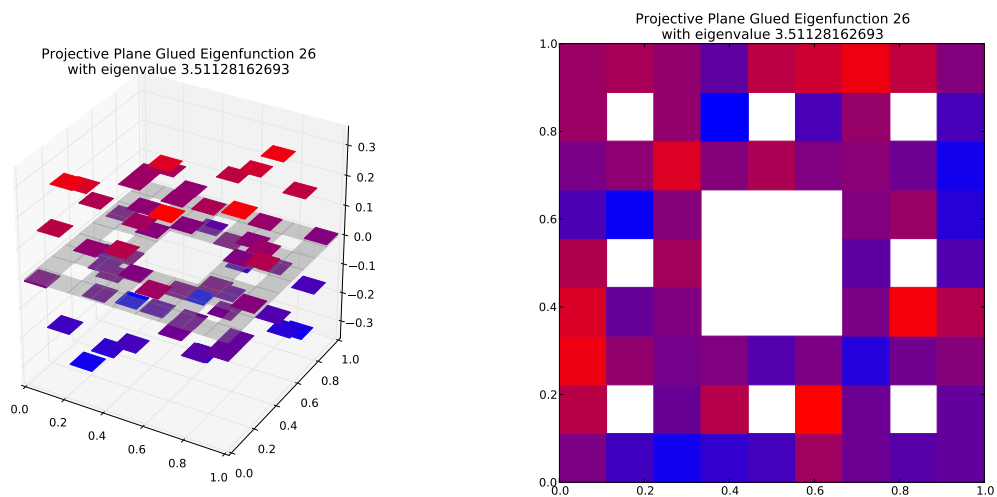
Eigenfunction 24 with eigenvalue 3.23477240994



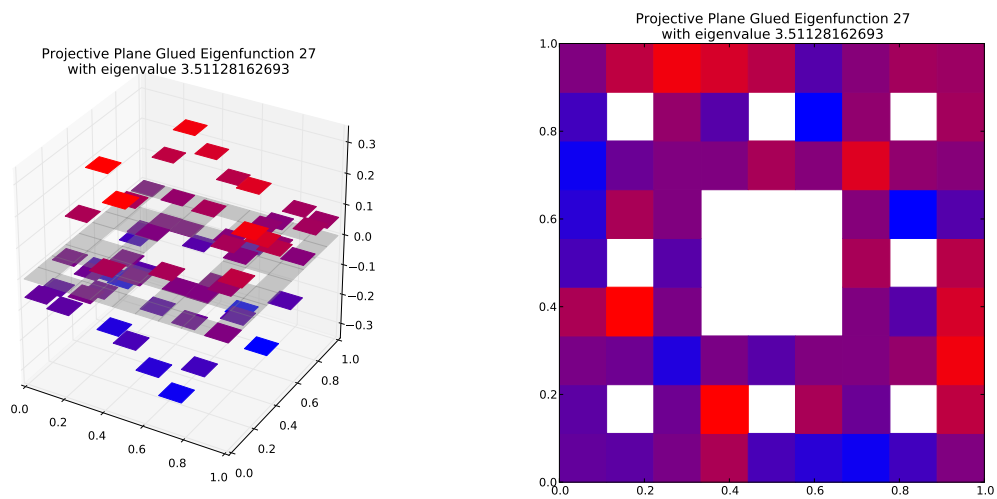
Eigenfunction 25 with eigenvalue 3.45878340901



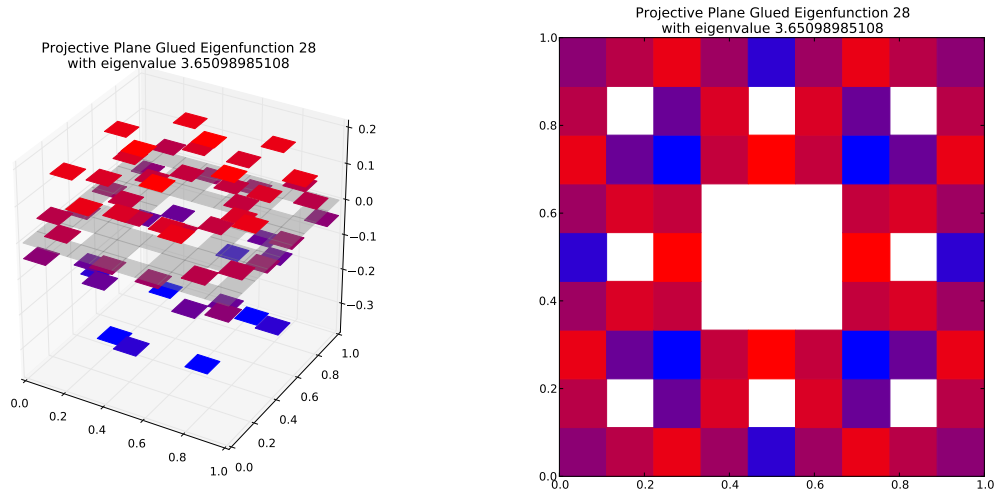
Eigenfunction 26 with eigenvalue 3.51128162693



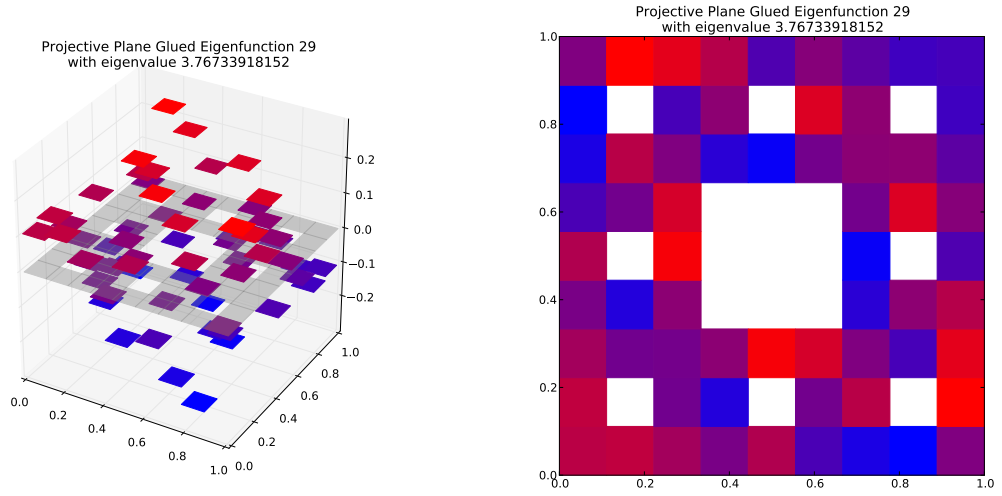
Eigenfunction 27 with eigenvalue 3.51128162693



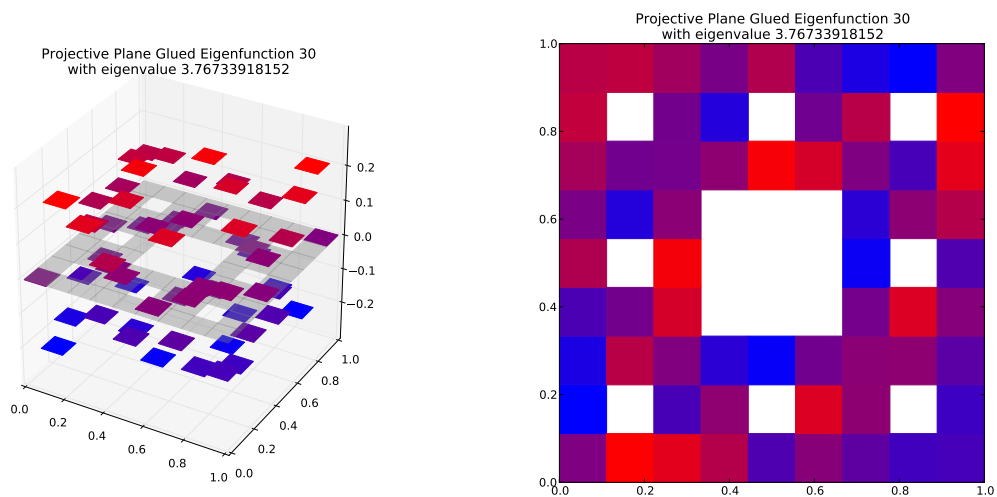
Eigenfunction 28 with eigenvalue 3.65098985108



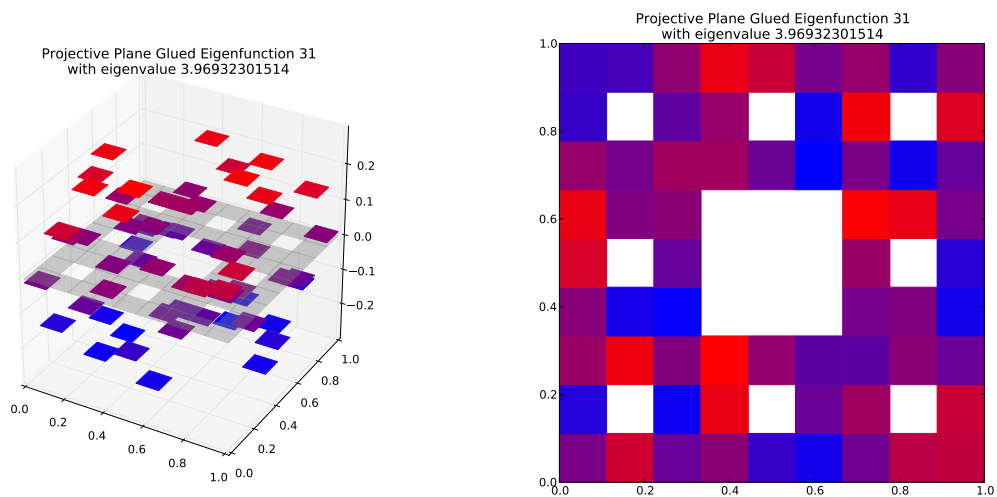
Eigenfunction 29 with eigenvalue 3.76733918152



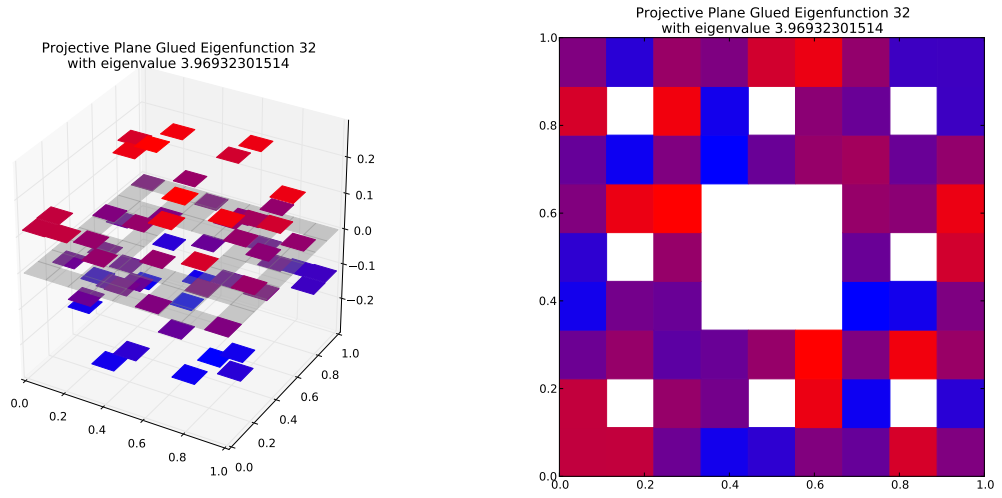
Eigenfunction 30 with eigenvalue 3.76733918152



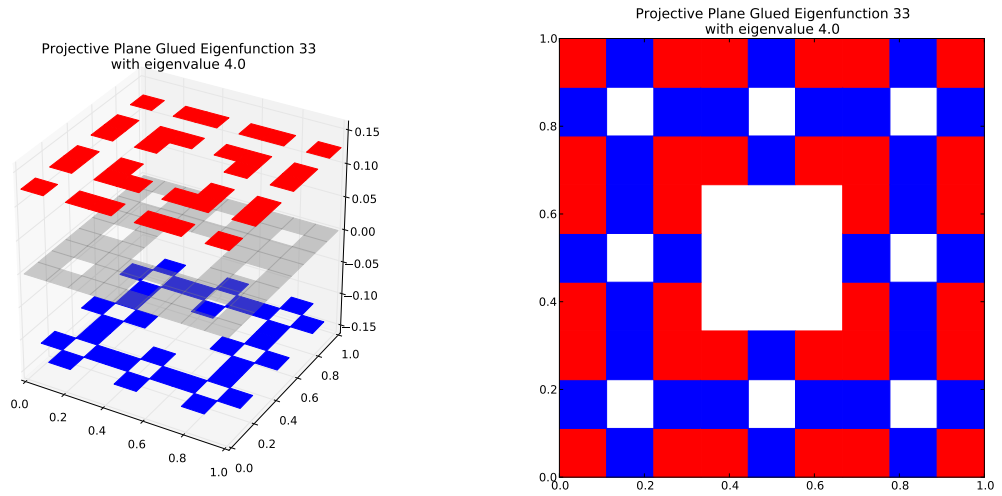
Eigenfunction 31 with eigenvalue 3.96932301514



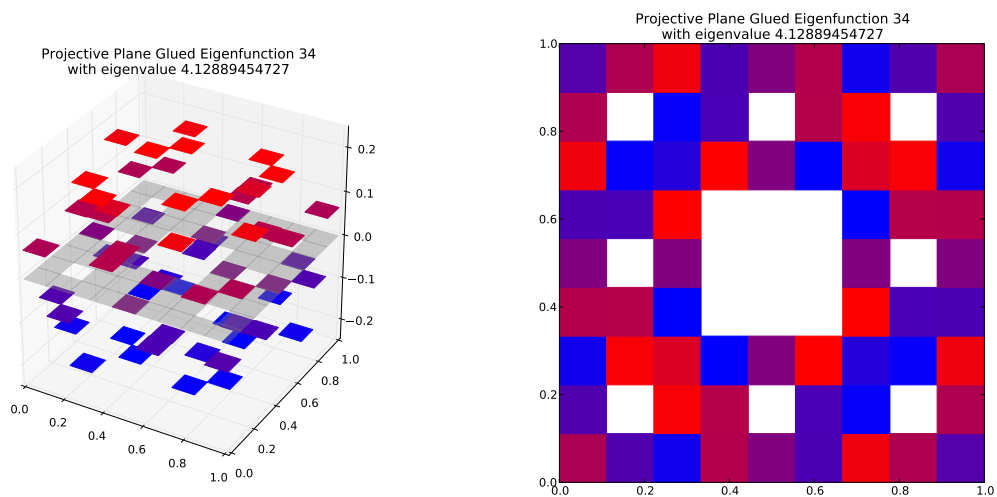
Eigenfunction 32 with eigenvalue 3.96932301514



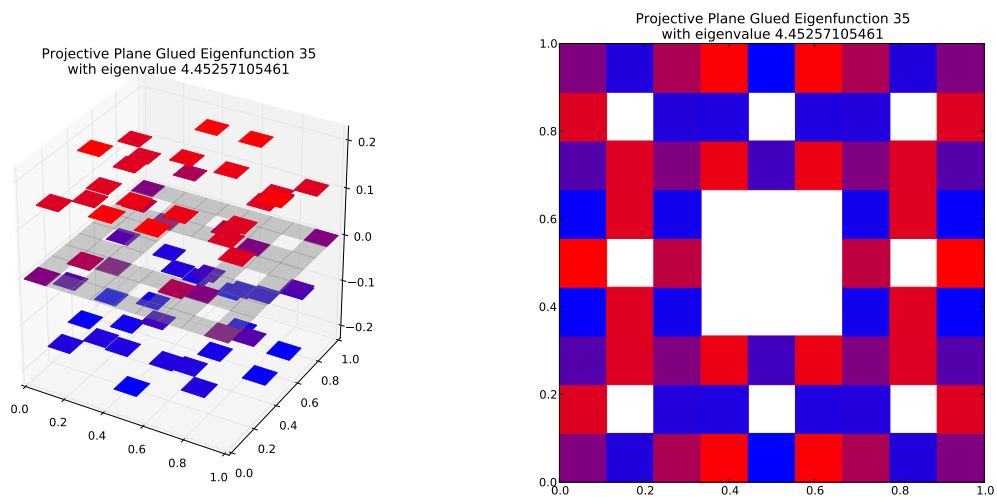
Eigenfunction 33 with eigenvalue 4.0



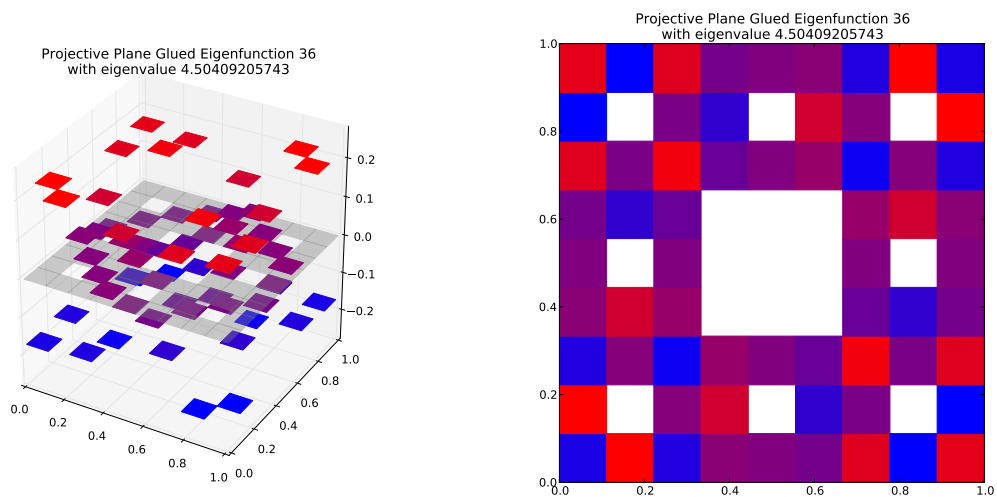
Eigenfunction 34 with eigenvalue 4.12889454727



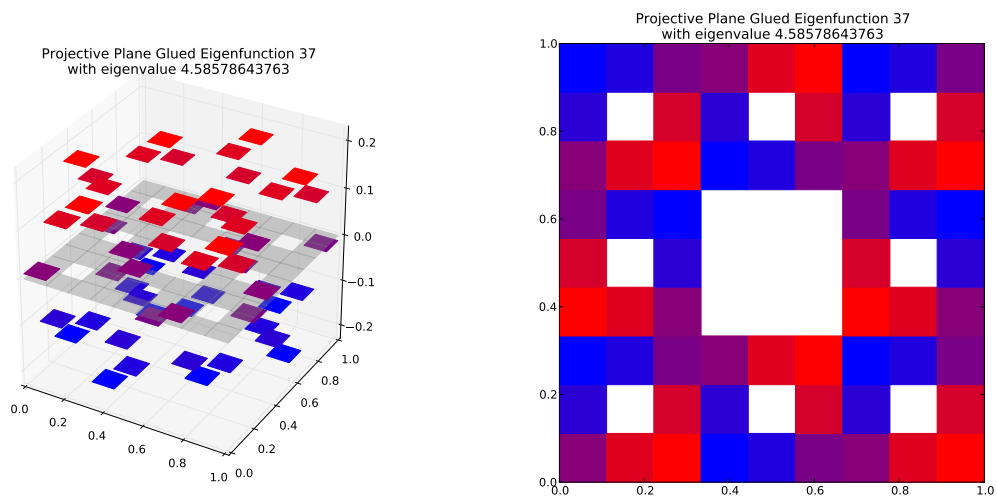
Eigenfunction 35 with eigenvalue 4.45257105461



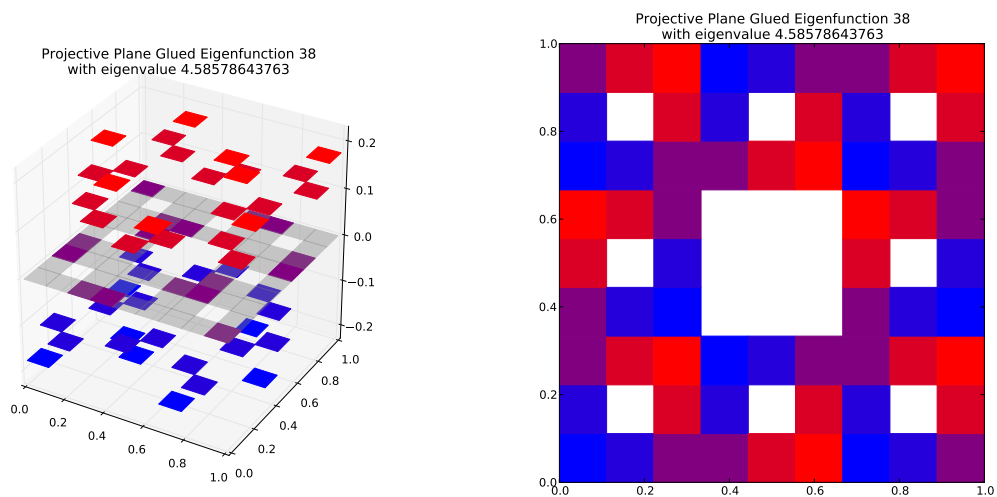
Eigenfunction 36 with eigenvalue 4.50409205743



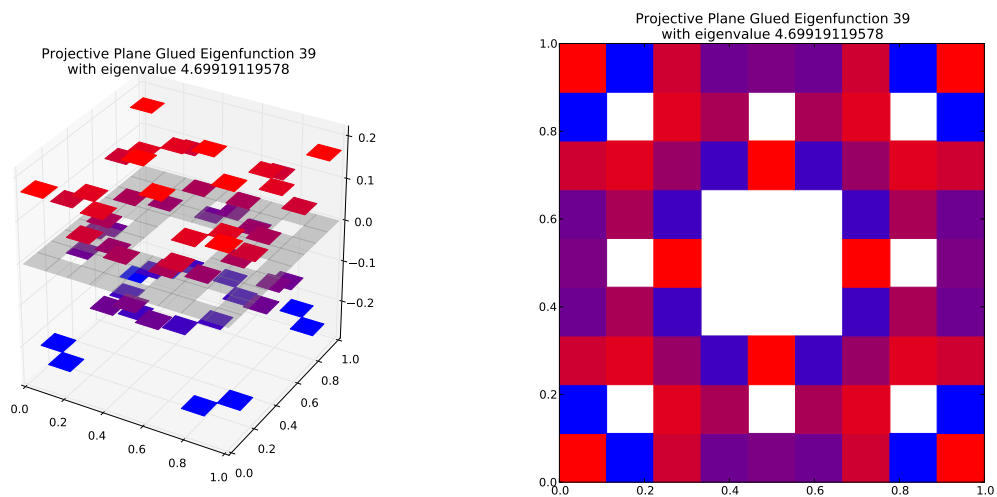
Eigenfunction 37 with eigenvalue 4.58578643763



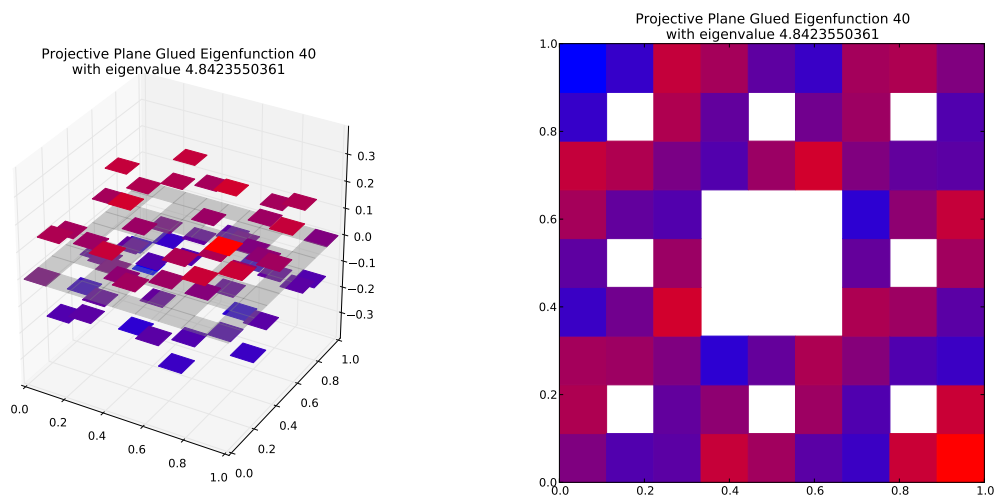
Eigenfunction 38 with eigenvalue 4.58578643763



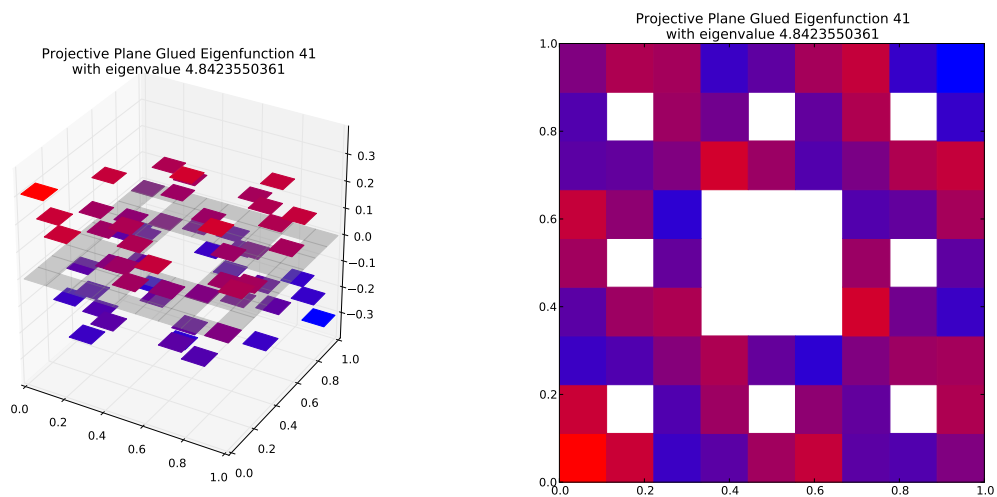
Eigenfunction 39 with eigenvalue 4.69919119578



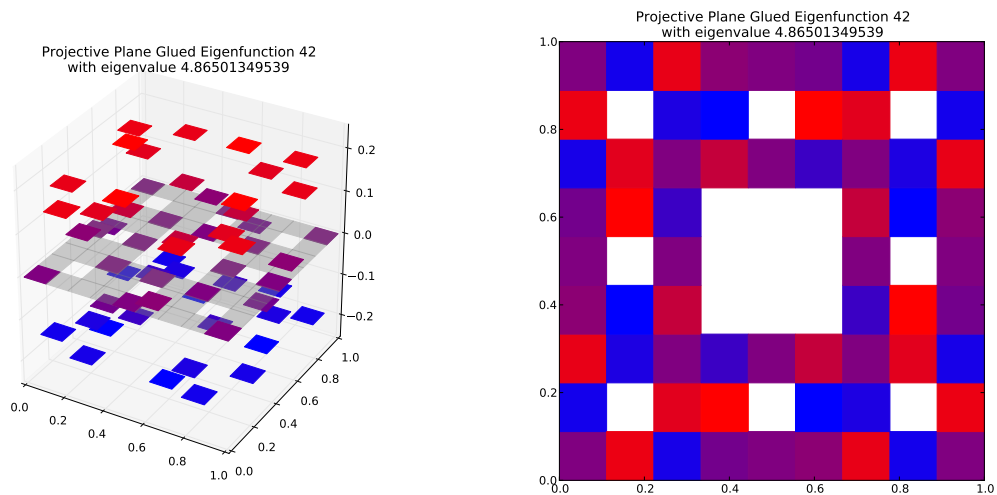
Eigenfunction 40 with eigenvalue 4.8423550361



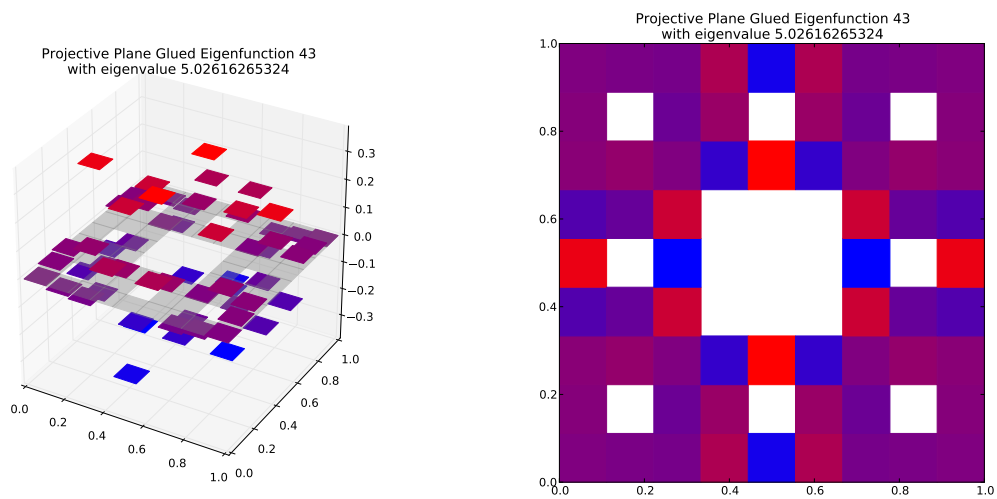
Eigenfunction 41 with eigenvalue 4.8423550361



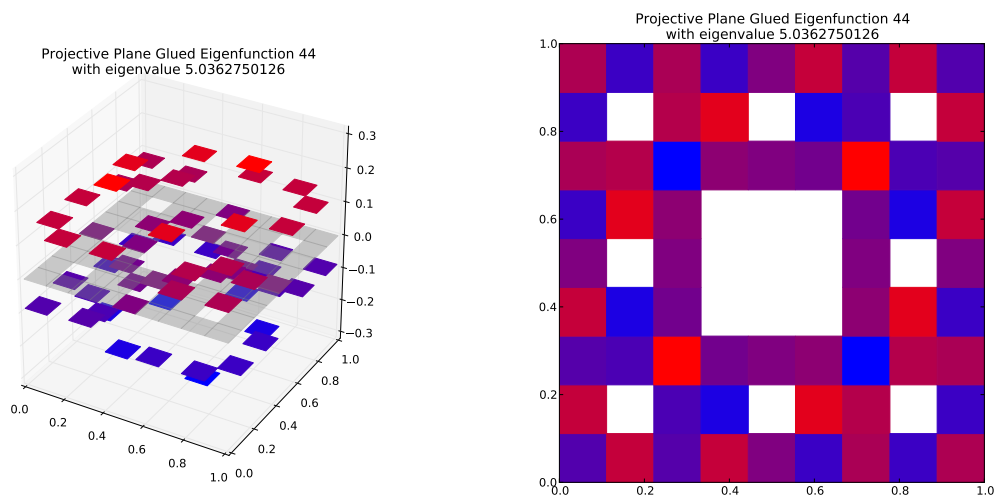
Eigenfunction 42 with eigenvalue 4.86501349539



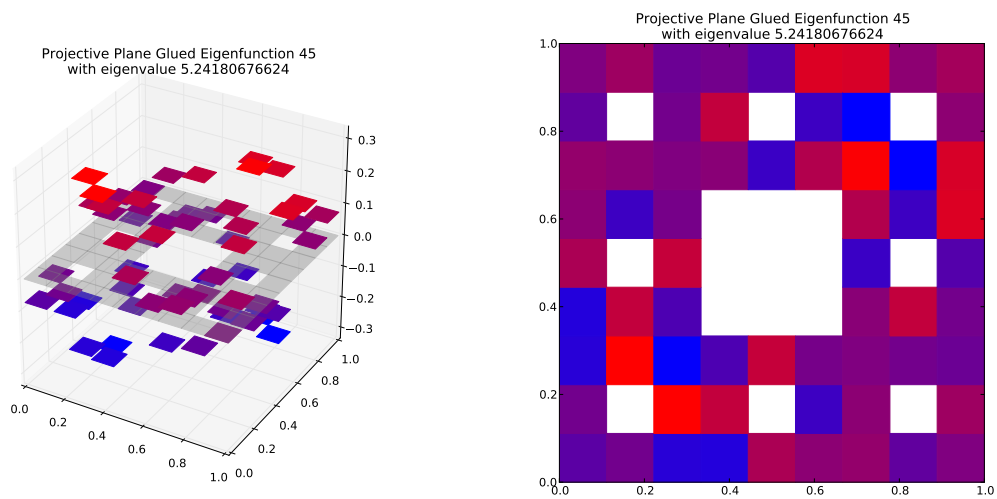
Eigenfunction 43 with eigenvalue 5.02616265324



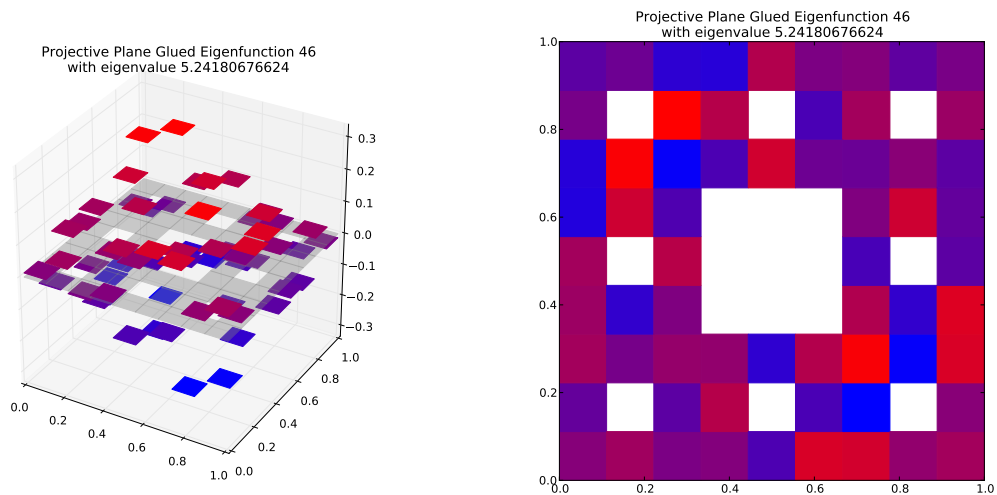
Eigenfunction 44 with eigenvalue 5.0362750126



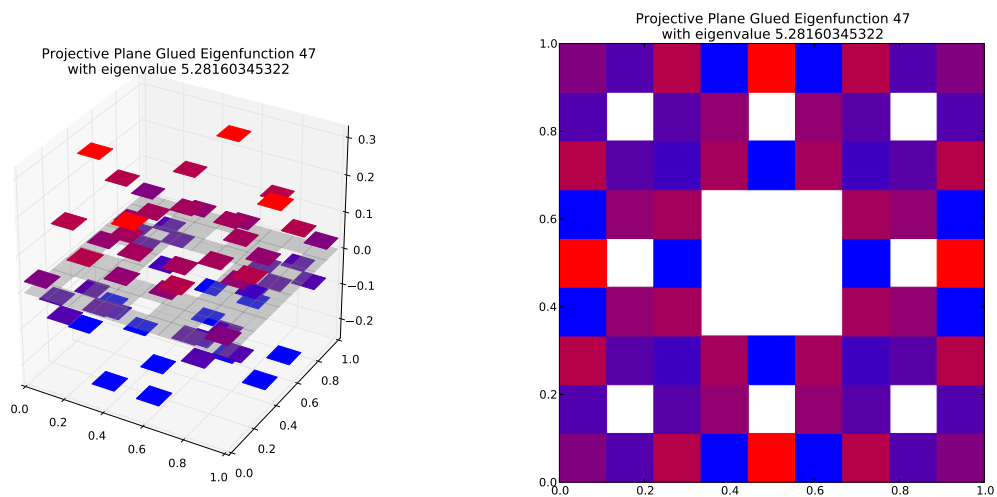
Eigenfunction 45 with eigenvalue 5.24180676624



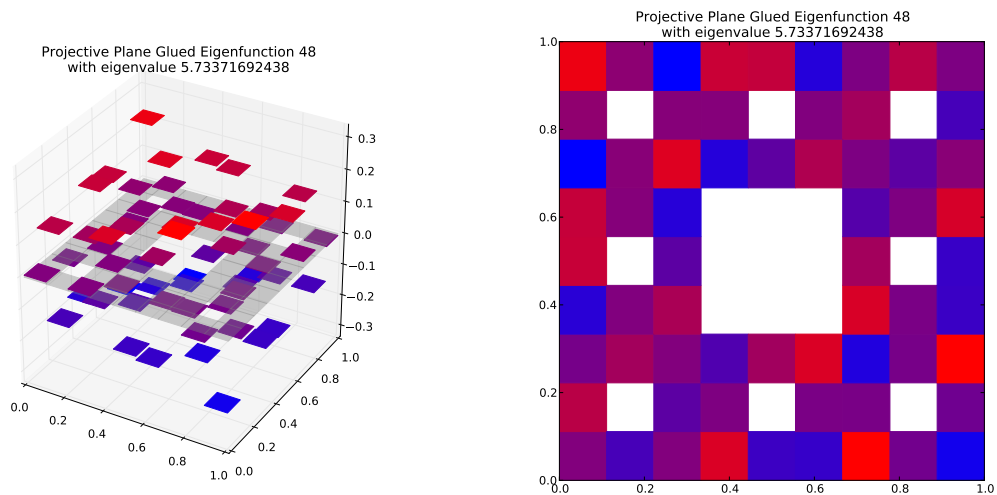
Eigenfunction 46 with eigenvalue 5.24180676624



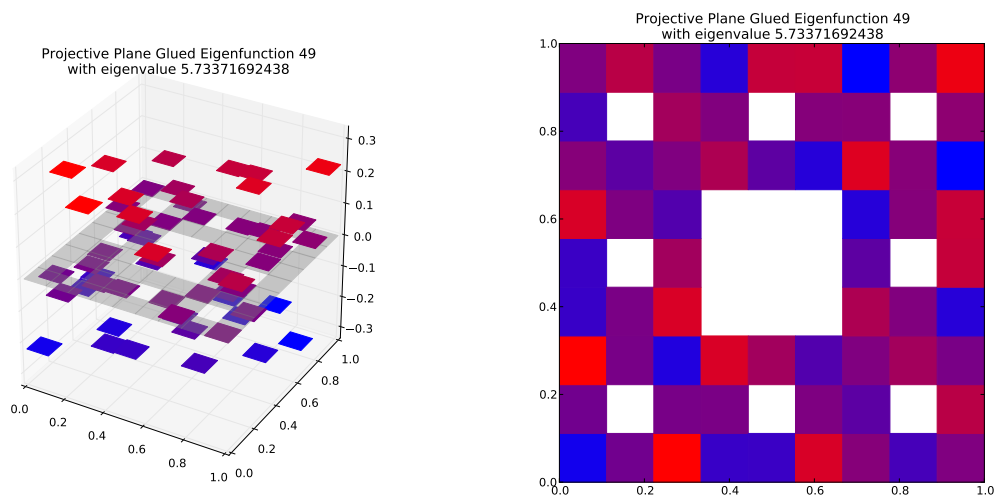
Eigenfunction 47 with eigenvalue 5.28160345322



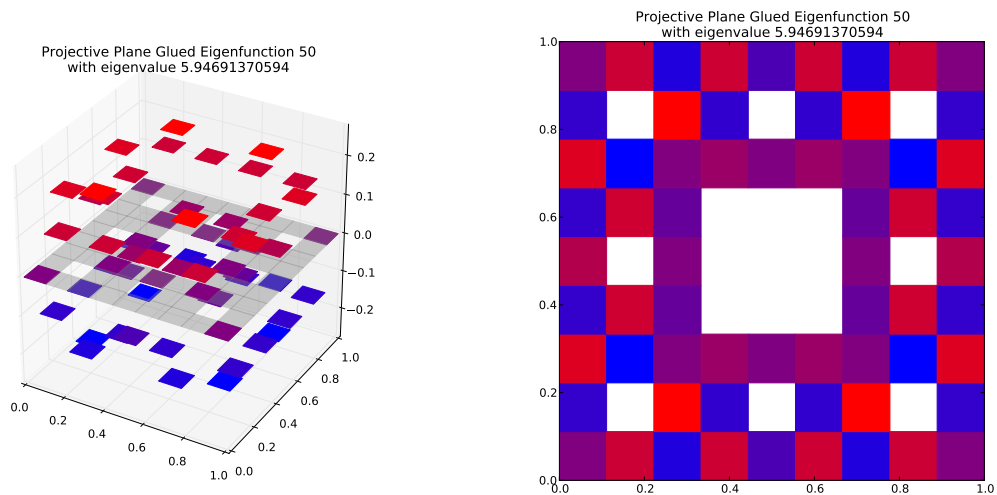
Eigenfunction 48 with eigenvalue 5.73371692438



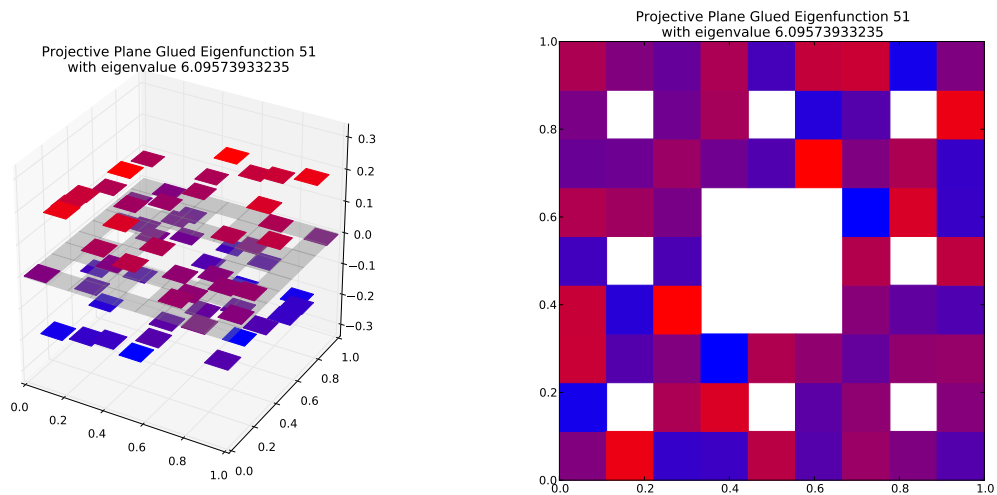
Eigenfunction 49 with eigenvalue 5.73371692438



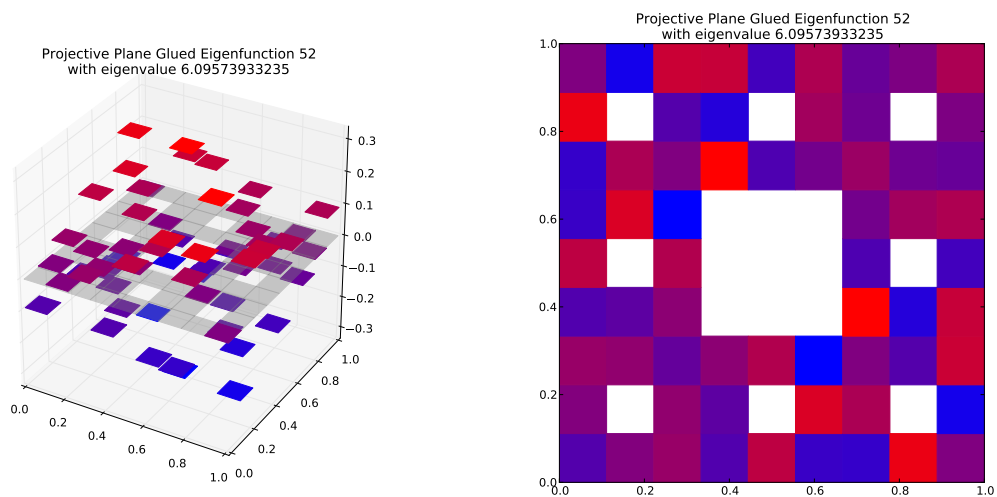
Eigenfunction 50 with eigenvalue 5.94691370594



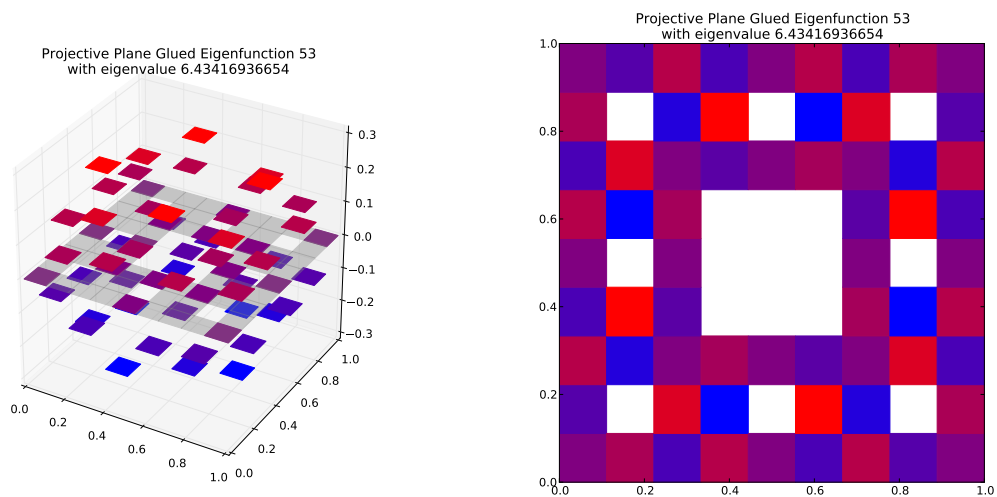
Eigenfunction 51 with eigenvalue 6.09573933235



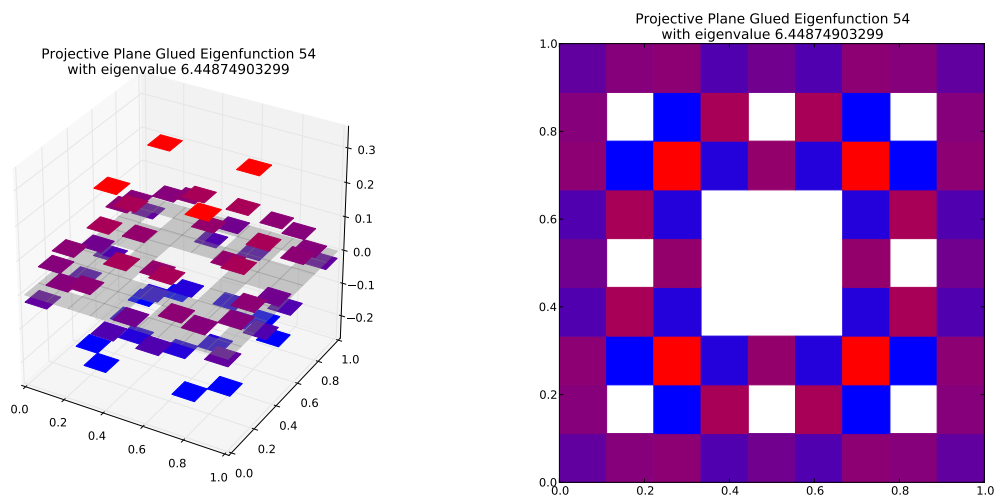
Eigenfunction 52 with eigenvalue 6.09573933235



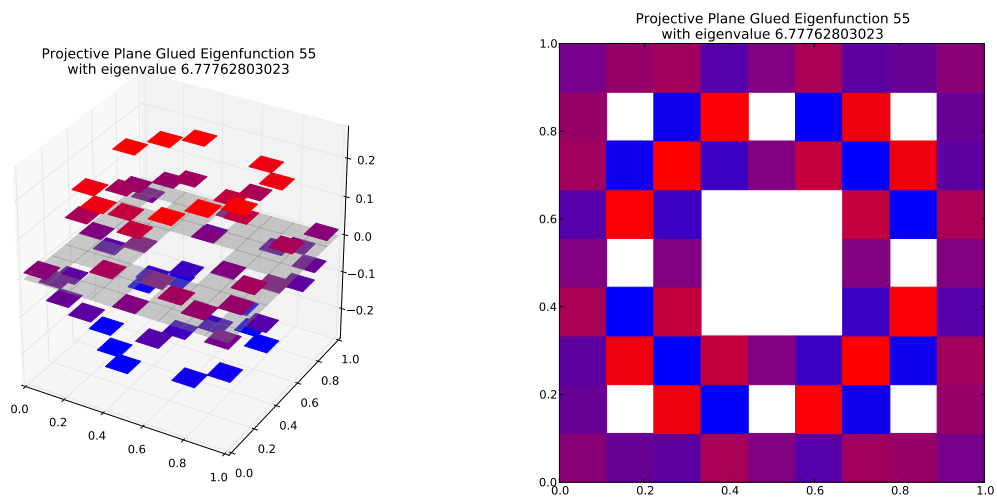
Eigenfunction 53 with eigenvalue 6.43416936654



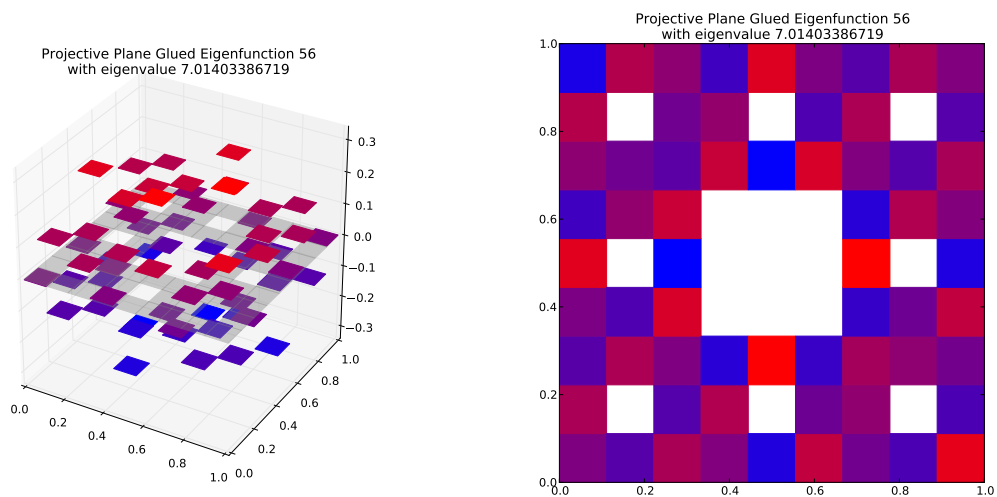
Eigenfunction 54 with eigenvalue 6.44874903299



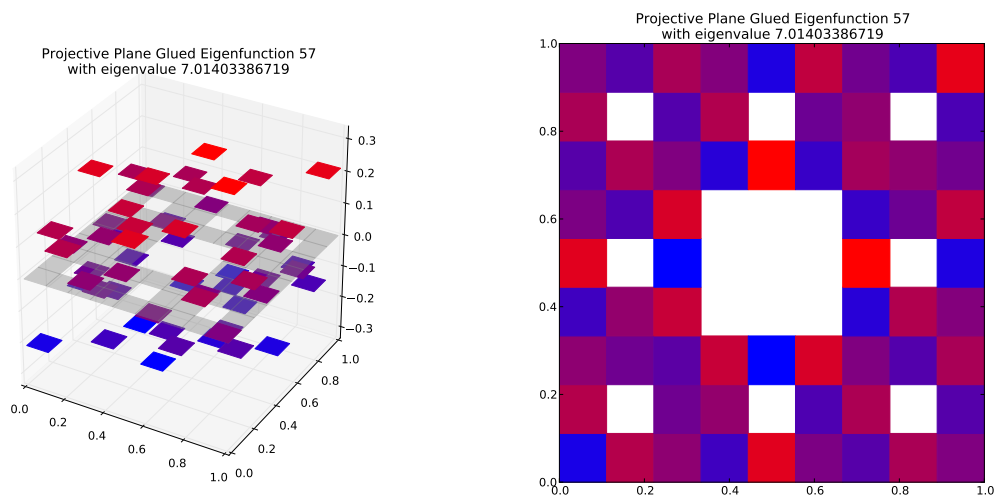
Eigenfunction 55 with eigenvalue 6.77762803023



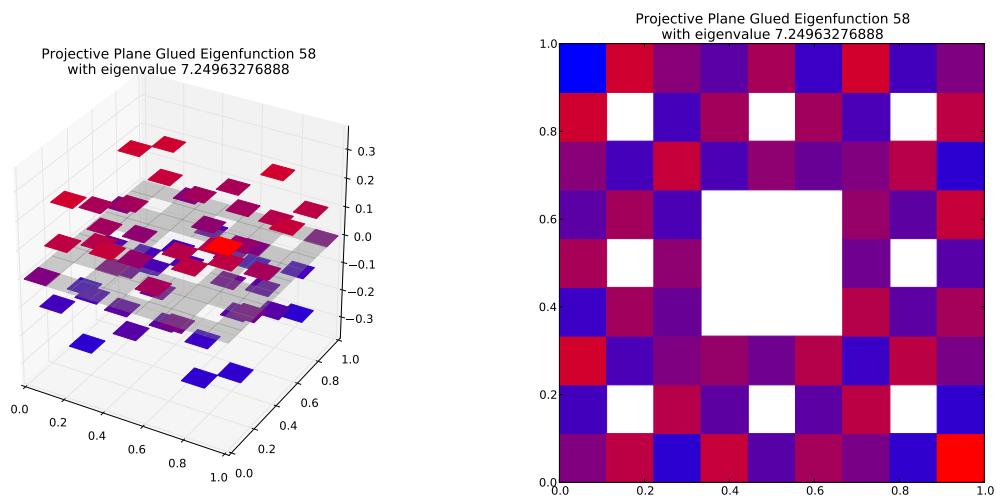
Eigenfunction 56 with eigenvalue 7.01403386719



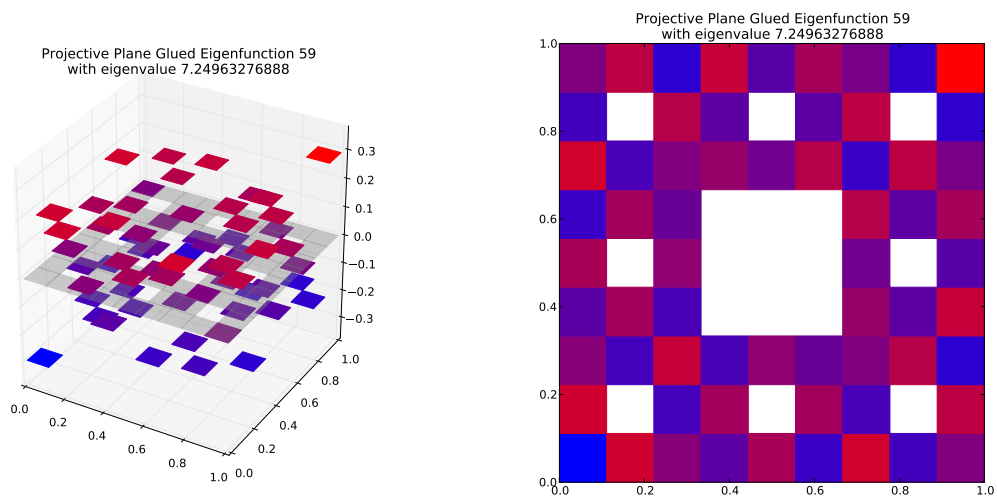
Eigenfunction 57 with eigenvalue 7.01403386719



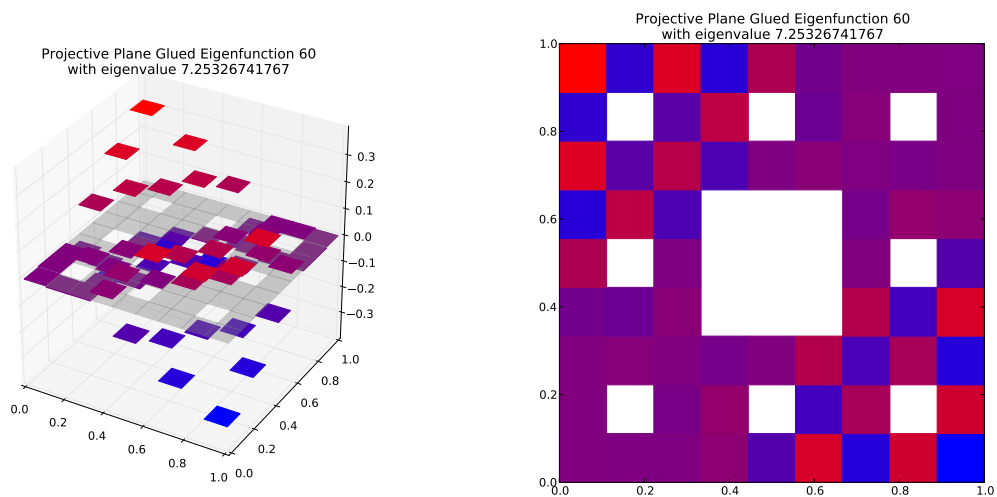
Eigenfunction 58 with eigenvalue 7.24963276888



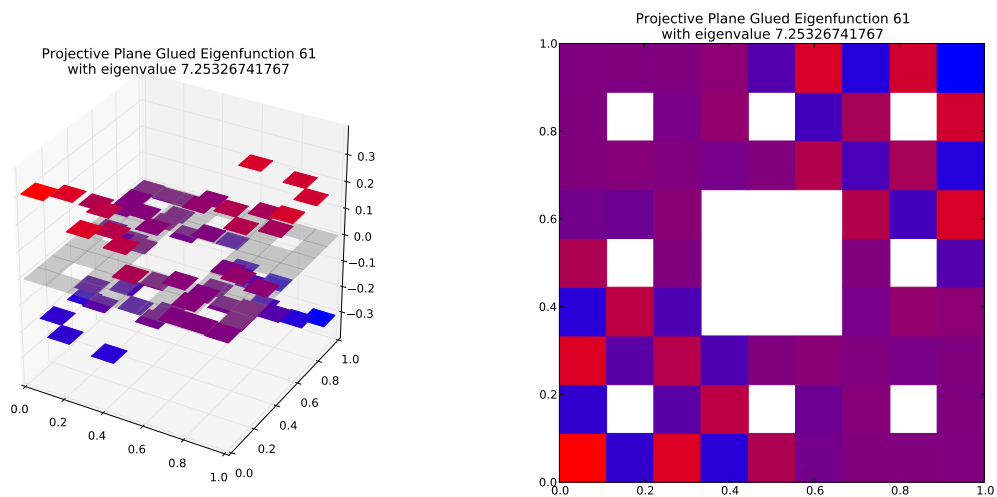
Eigenfunction 59 with eigenvalue 7.24963276888



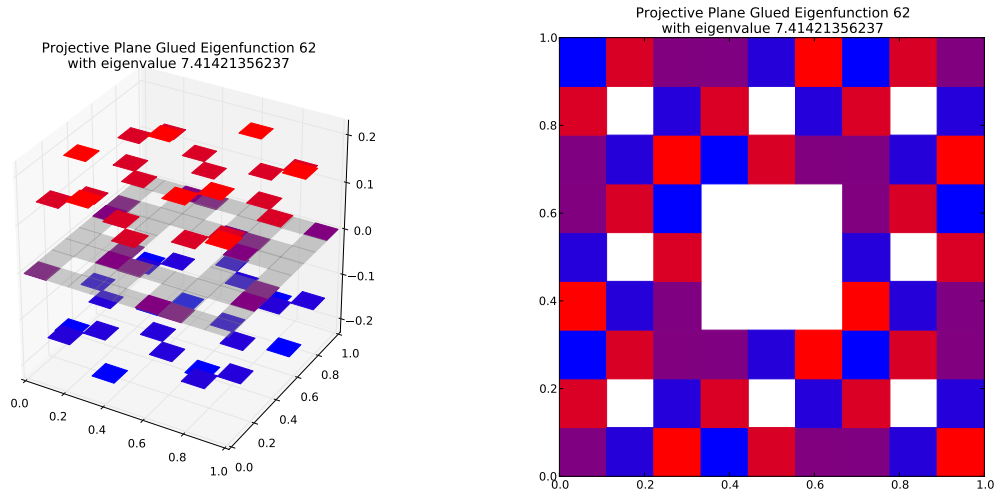
Eigenfunction 60 with eigenvalue 7.25326741767



Eigenfunction 61 with eigenvalue 7.25326741767



Eigenfunction 62 with eigenvalue 7.41421356237



Eigenfunction 63 with eigenvalue 7.41421356237

