

Expander Graph Pix

Paul E. Gunnells

UMass Amherst

PROMYS 2010

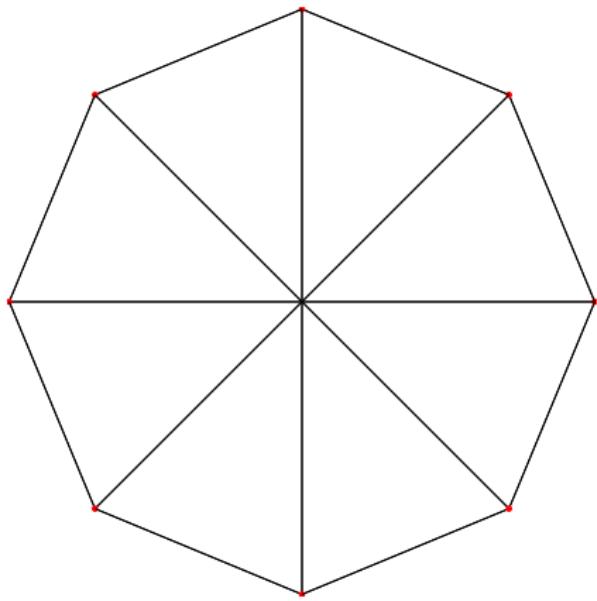


Figure: Opposite graph, level = 8

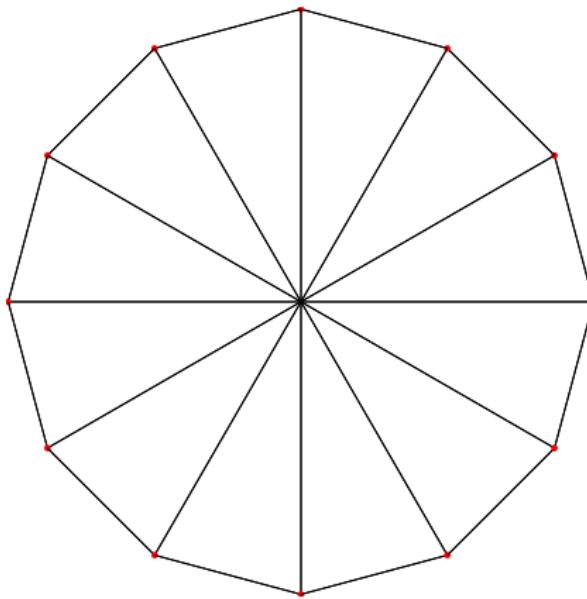


Figure: Opposite graph, level = 12

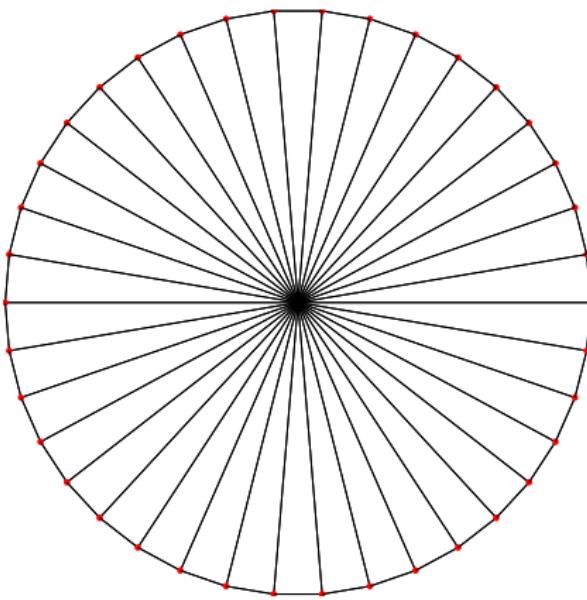


Figure: Opposite graph, level = 38

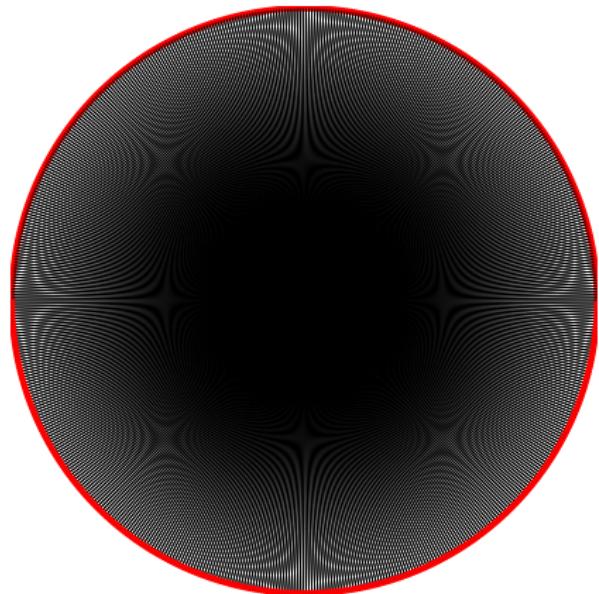


Figure: Opposite graph, level = 618

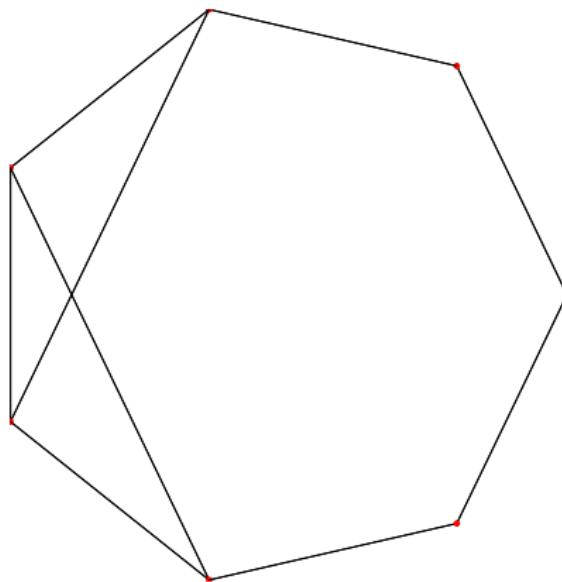


Figure: Inverse graph, level = 7

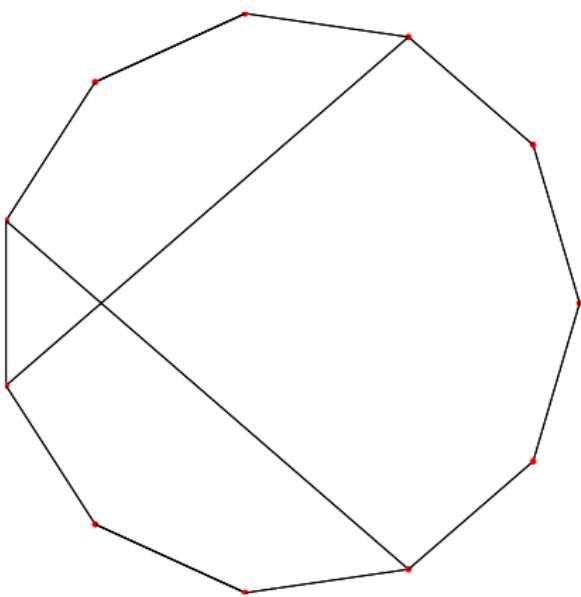


Figure: Inverse graph, level = 11

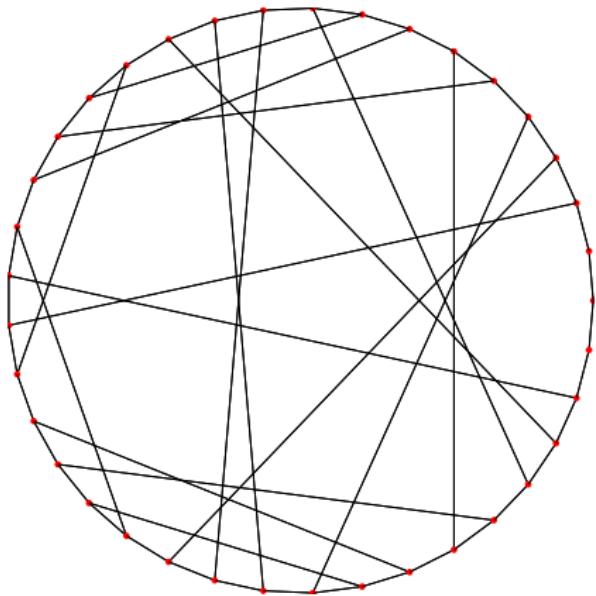


Figure: Inverse graph, level = 37

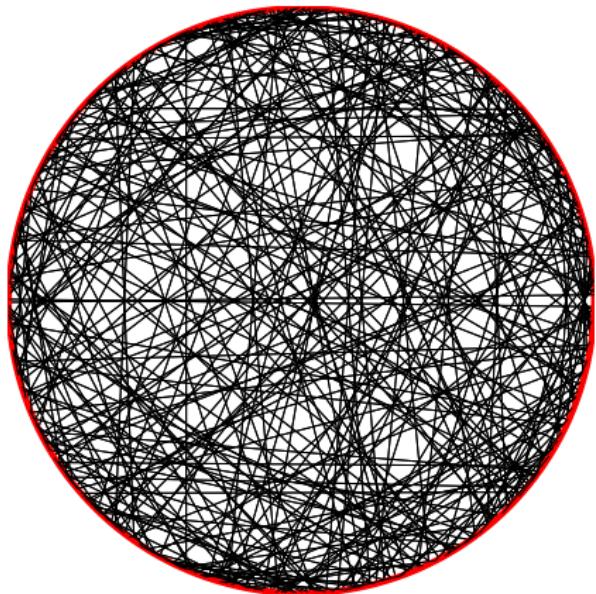


Figure: Inverse graph, level = 617

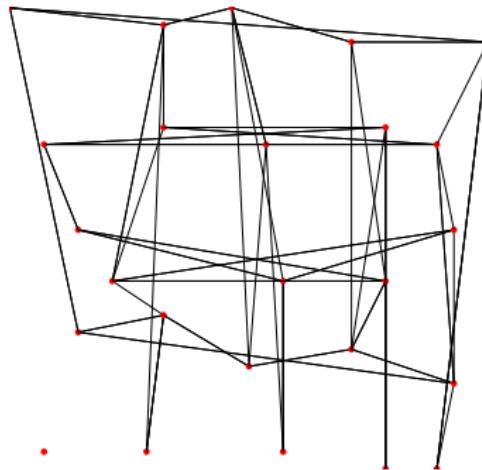


Figure: Margulis graph, level = 5

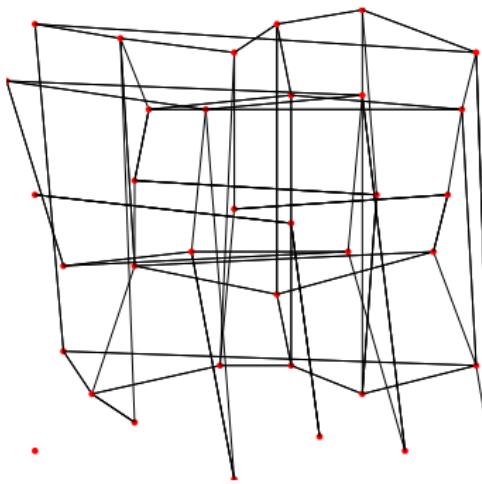


Figure: Margulis graph, level = 6

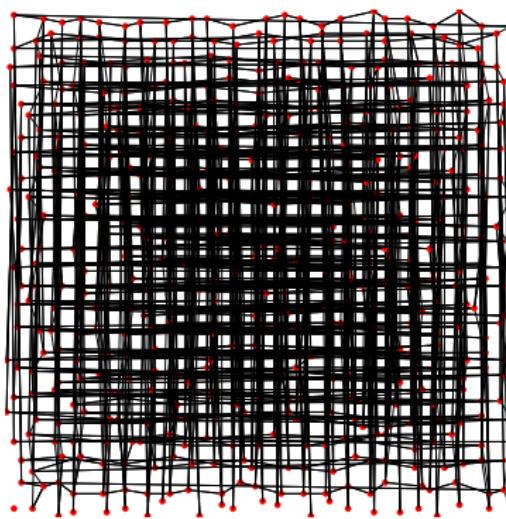


Figure: Margulis graph, level = 23

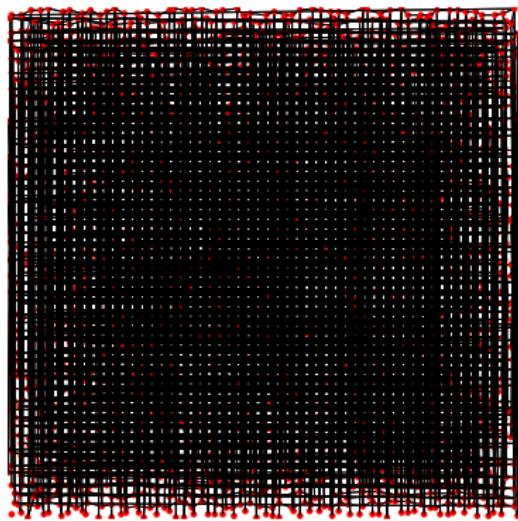


Figure: Margulis graph, level = 53

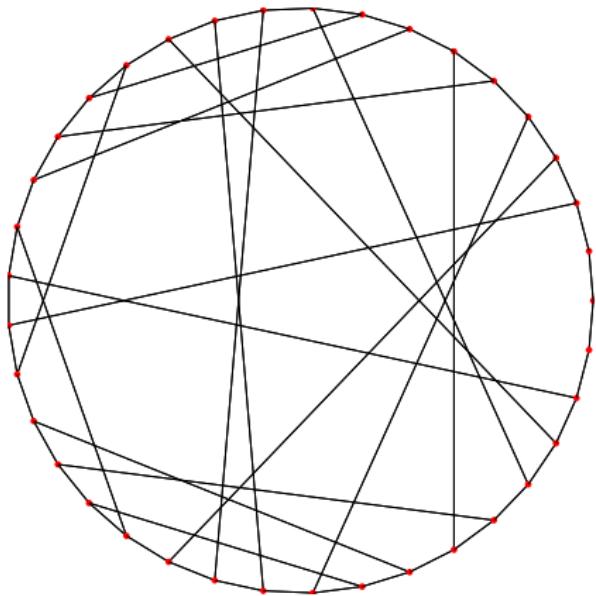


Figure: Inverse graph, level = 37

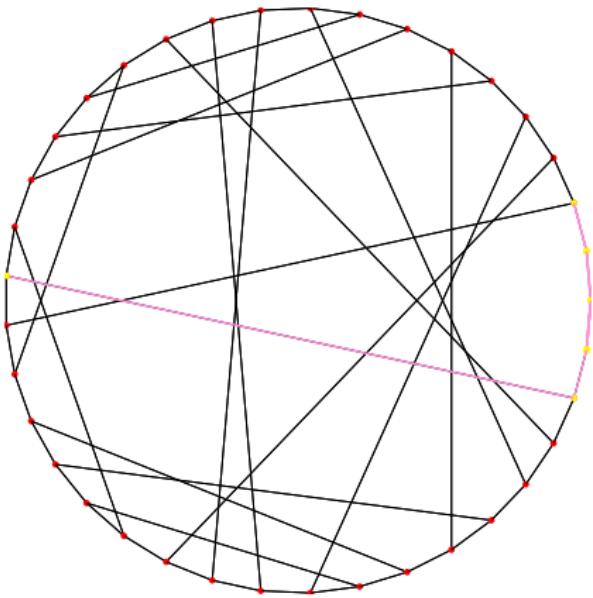


Figure: Inverse graph, level = 37, steps = 20

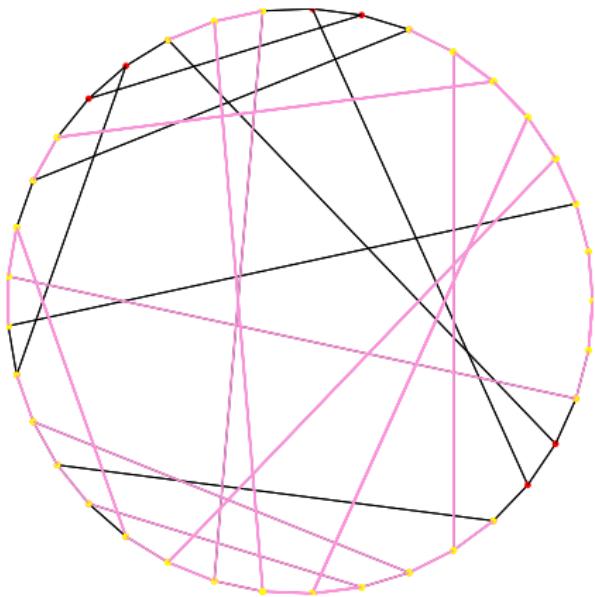


Figure: Inverse graph, level = 37, steps = 100

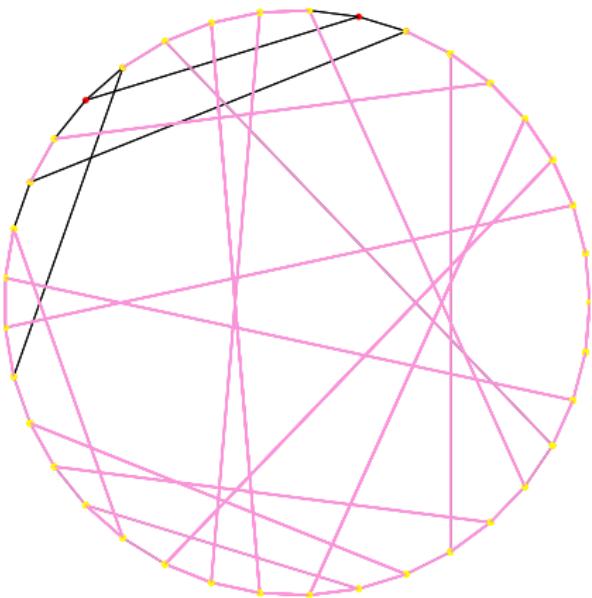


Figure: Inverse graph, level = 37, steps = 200

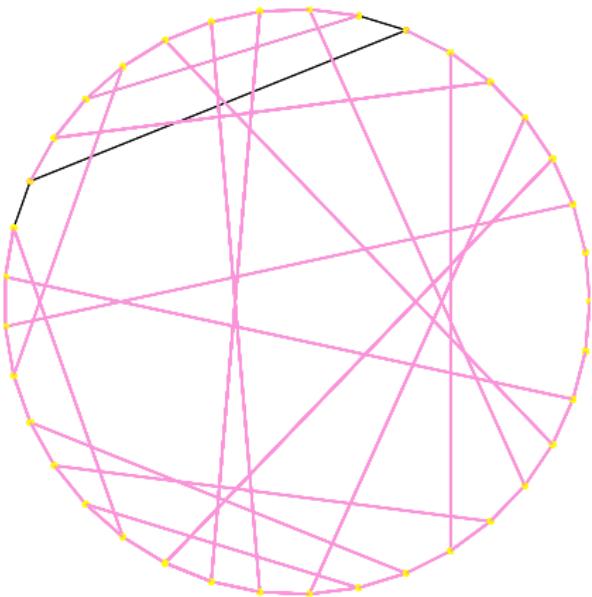


Figure: Inverse graph, level = 37, steps = 400

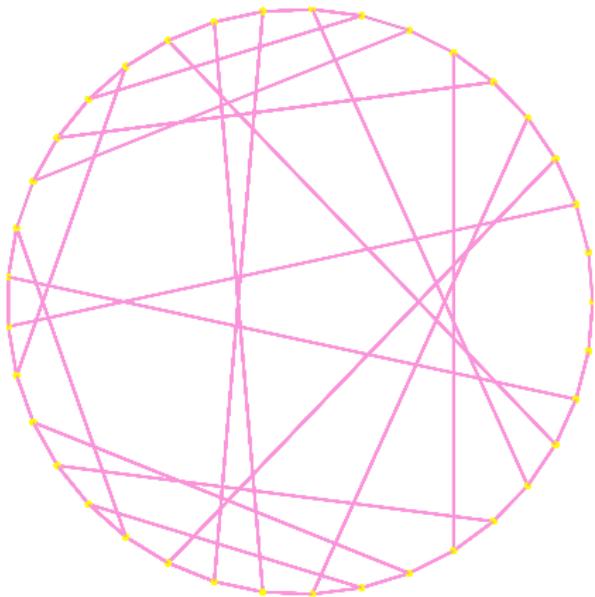


Figure: Inverse graph, level = 37, steps = 800

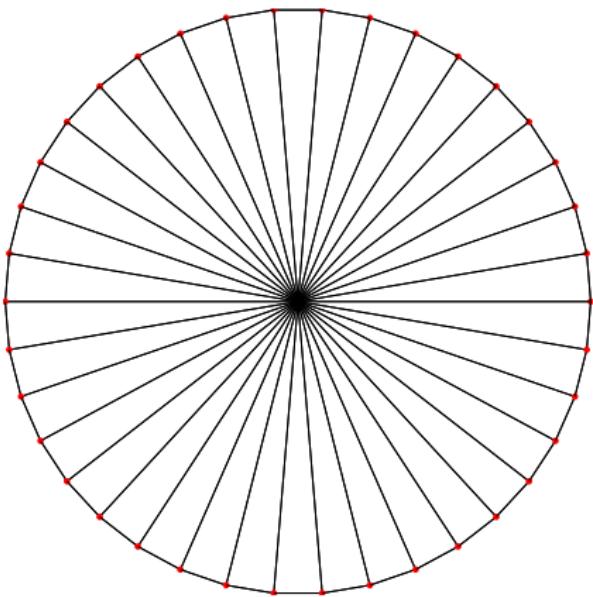


Figure: Opposite graph, level = 38

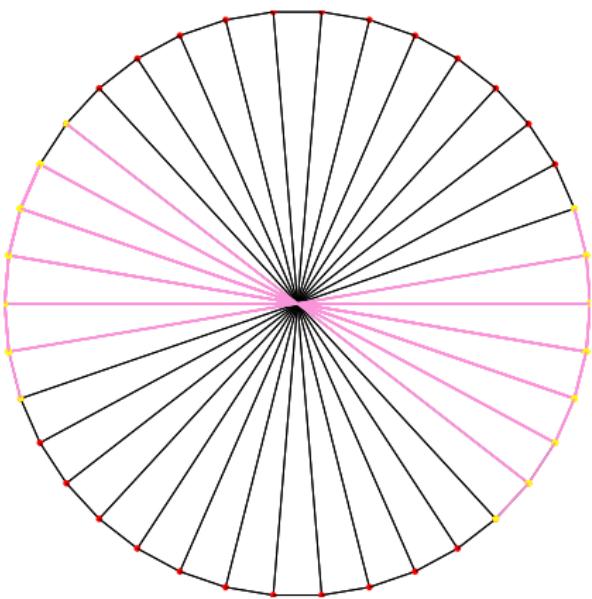


Figure: Opposite graph, level = 38, steps = 100

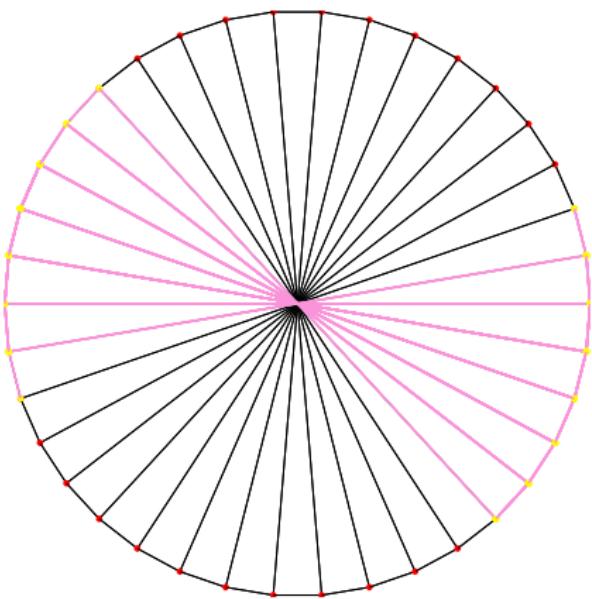


Figure: Opposite graph, level = 38, steps = 200

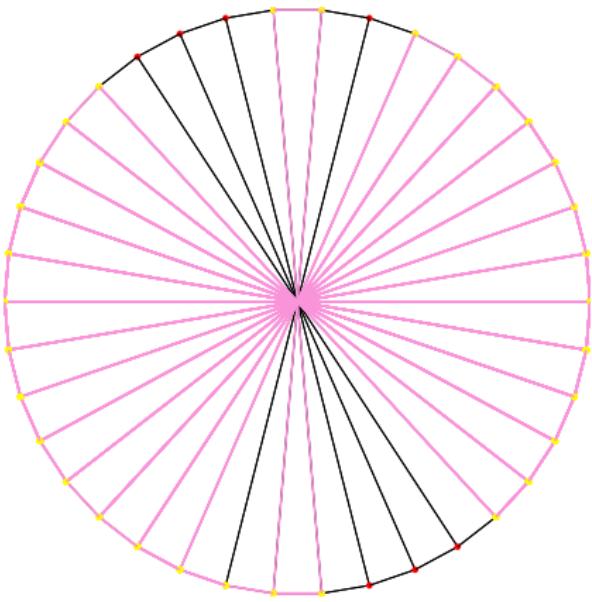


Figure: Opposite graph, level = 38, steps = 400

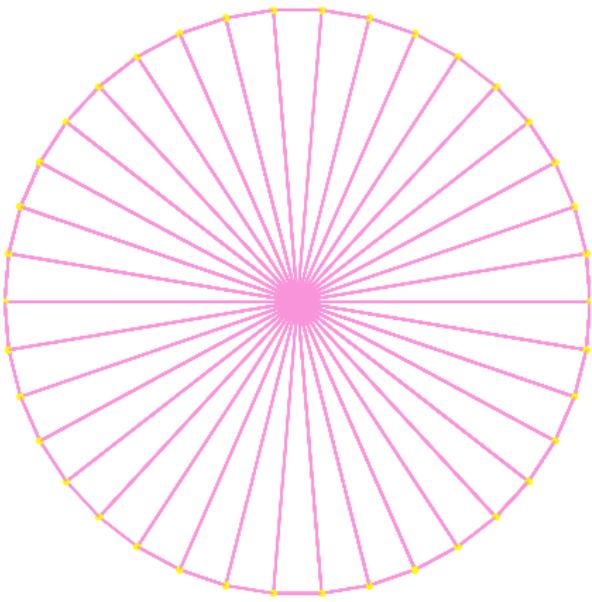


Figure: Opposite graph, level = 38, steps = 800

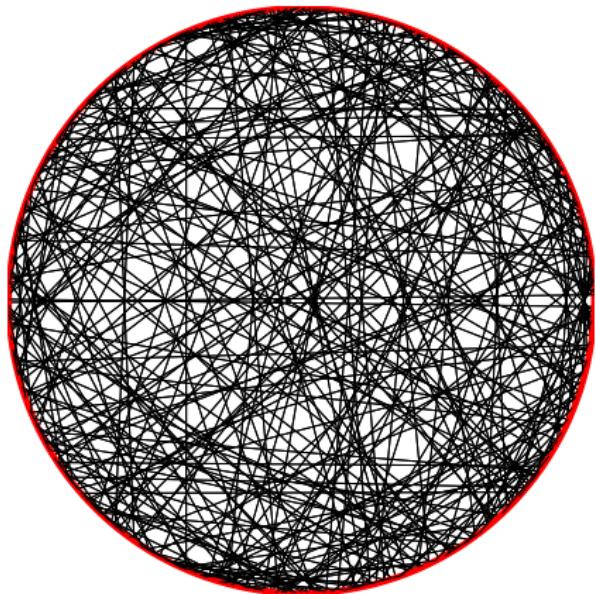


Figure: Inverse graph, level = 617

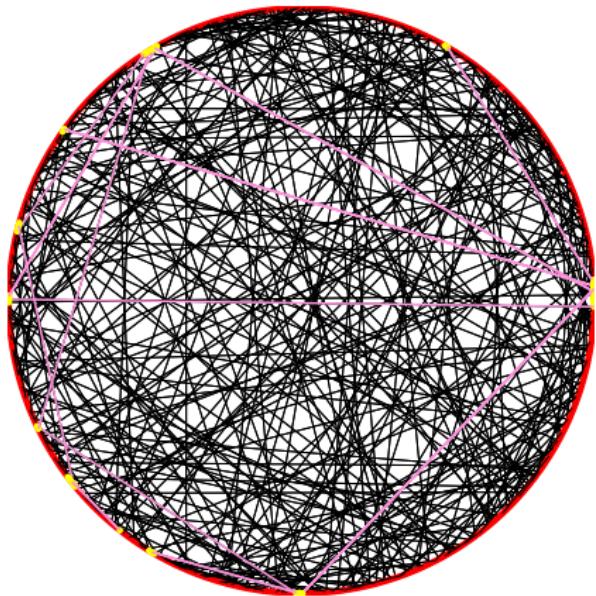


Figure: Inverse graph, level = 617, steps = 100

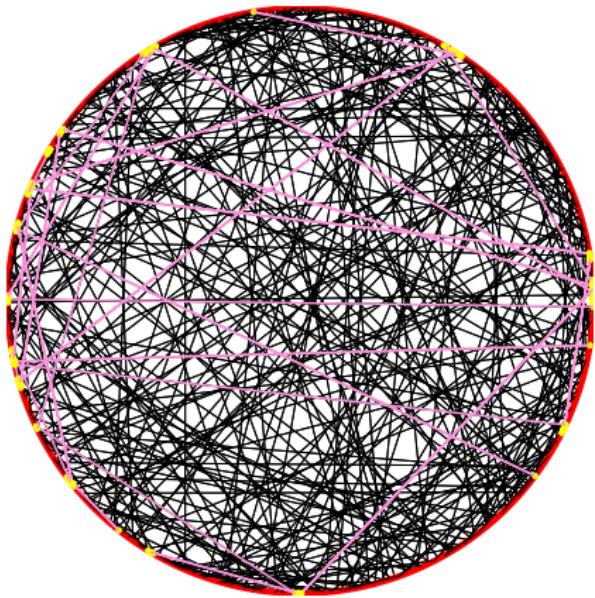


Figure: Inverse graph, level = 617, steps = 200

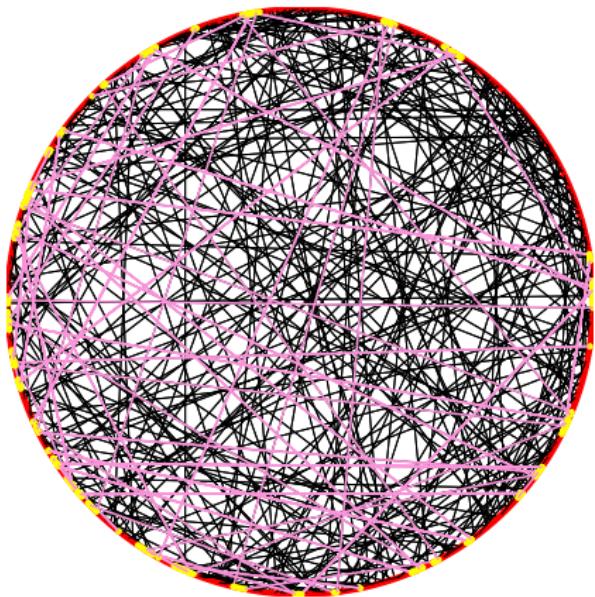


Figure: Inverse graph, level = 617, steps = 400

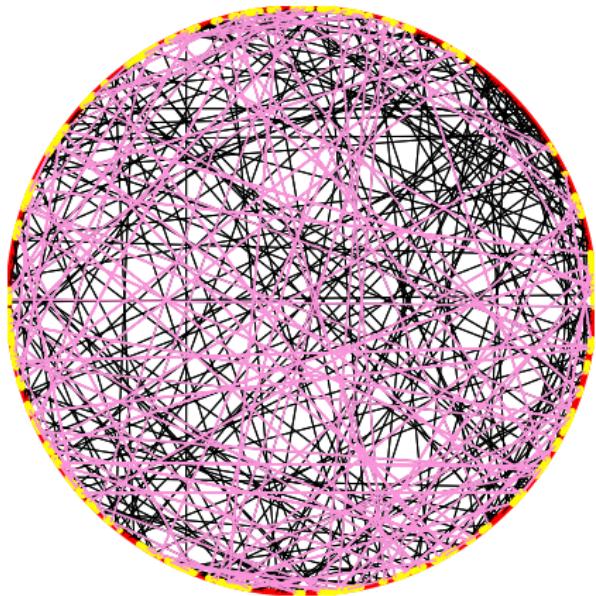


Figure: Inverse graph, level = 617, steps = 800

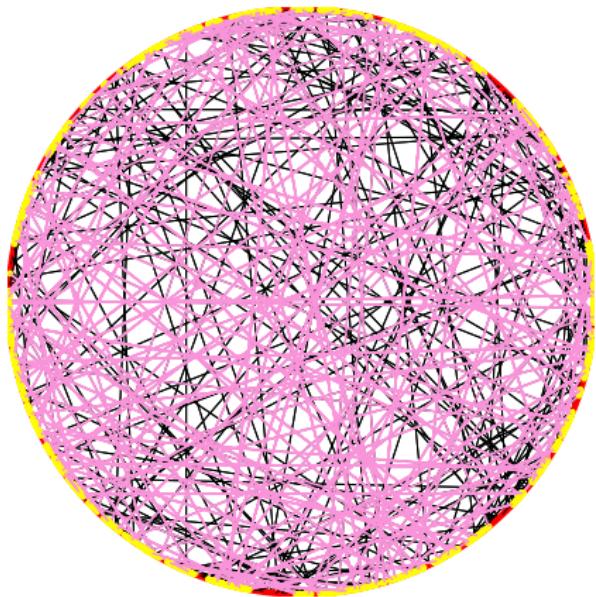


Figure: Inverse graph, level = 617, steps = 1600

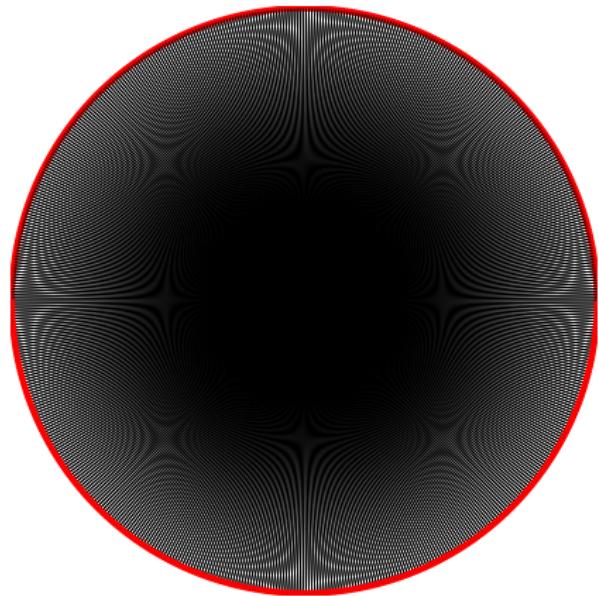


Figure: Opposite graph, level = 618

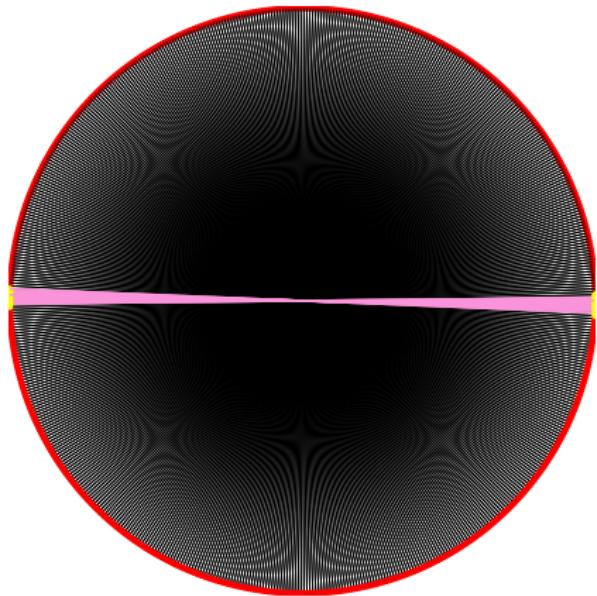


Figure: Opposite graph, level = 618, steps = 100

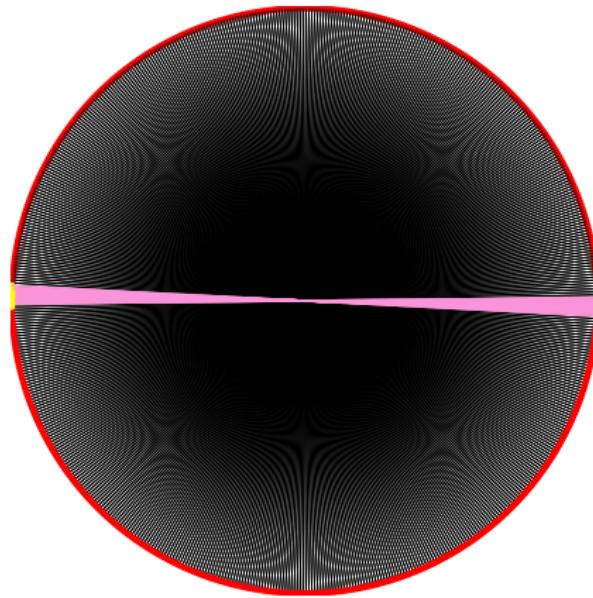


Figure: Opposite graph, level = 618, steps = 200

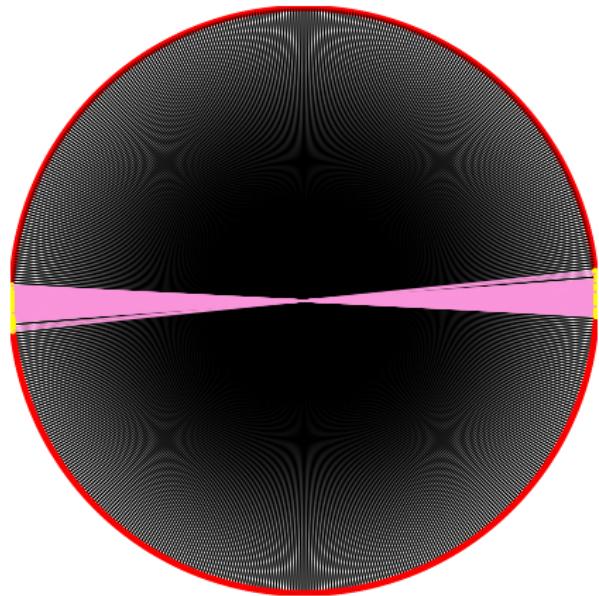


Figure: Opposite graph, level = 618, steps = 400

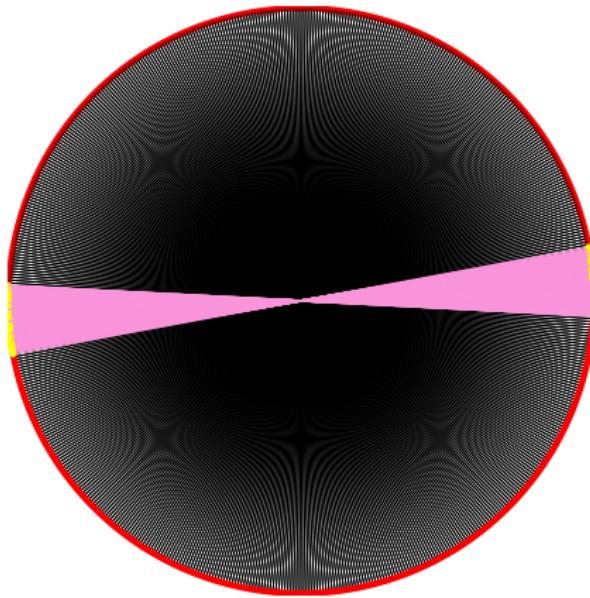


Figure: Opposite graph, level = 618, steps = 800

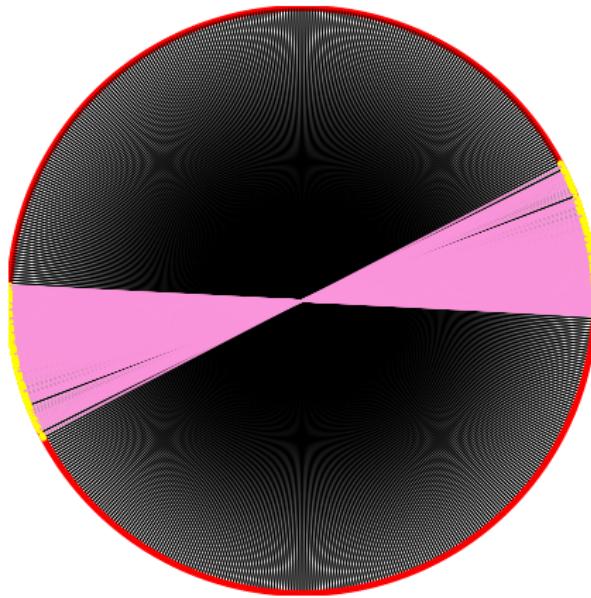


Figure: Opposite graph, level = 618, steps = 1600

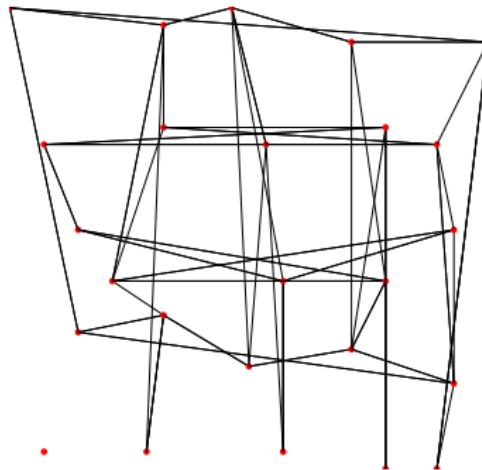


Figure: Margulis graph, level = 5

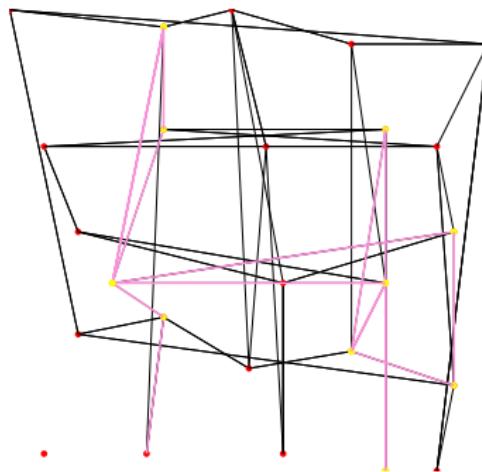


Figure: Margulis graph, level = 5, steps = 20

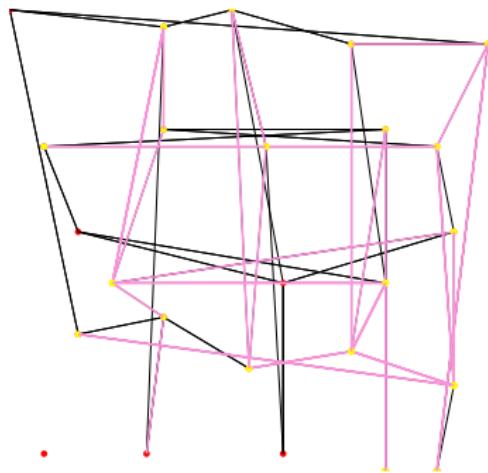


Figure: Margulis graph, level = 5, steps = 40

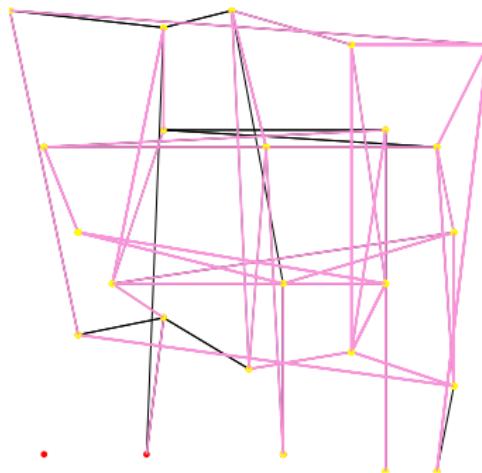


Figure: Margulis graph, level = 5, steps = 80

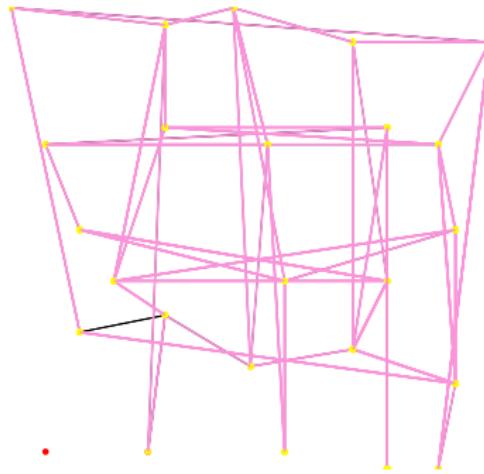


Figure: Margulis graph, level = 5, steps = 160

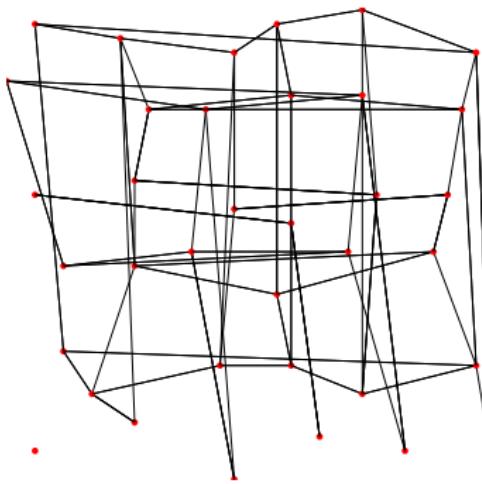


Figure: Margulis graph, level = 6

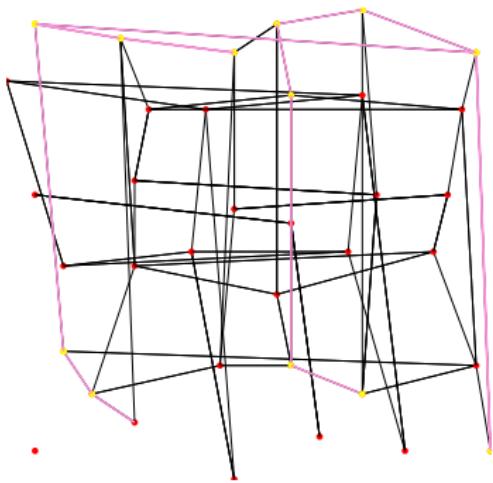


Figure: Margulis graph, level = 6, steps = 20

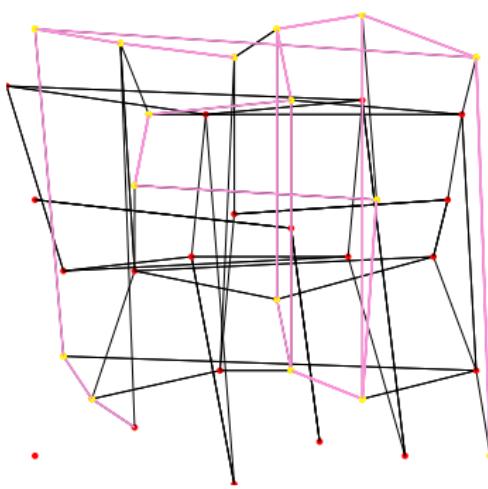


Figure: Margulis graph, level = 6, steps = 40

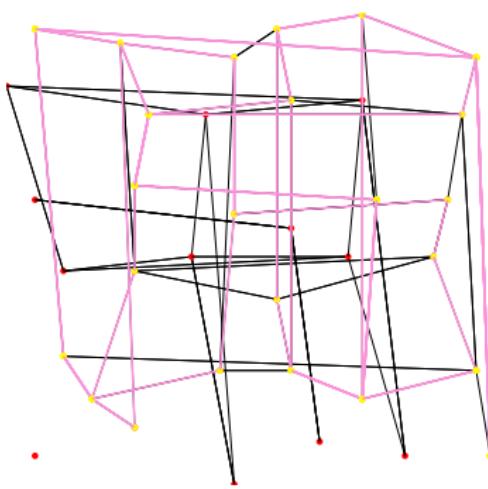


Figure: Margulis graph, level = 6, steps = 80

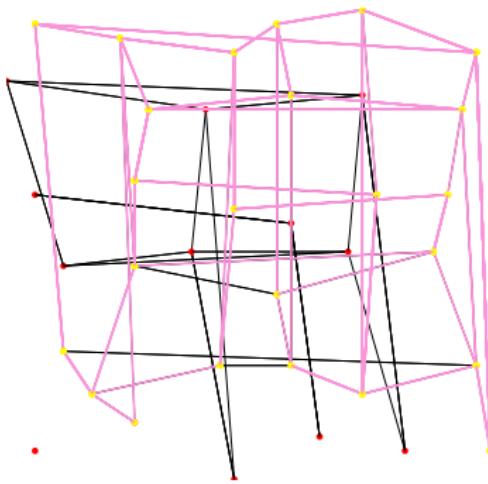


Figure: Margulis graph, level = 6, steps = 160

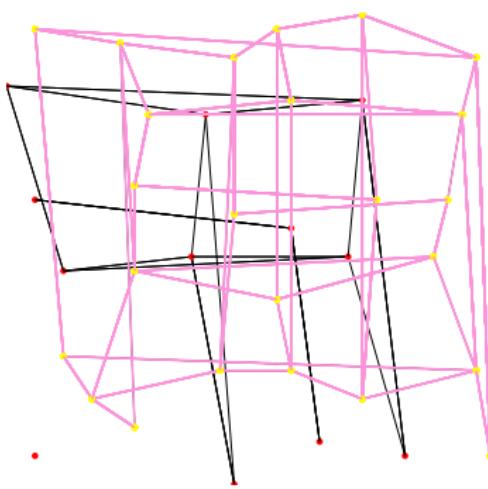


Figure: Margulis graph, level = 6, steps = 320

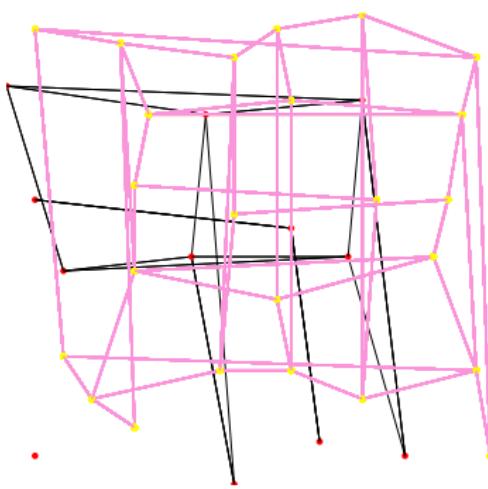


Figure: Margulis graph, level = 6, steps = 1600

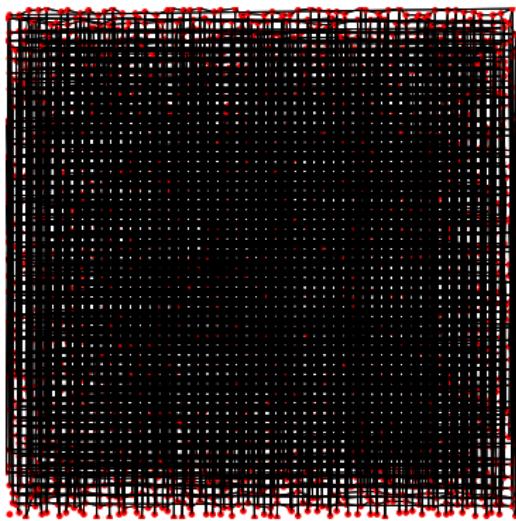


Figure: Margulis graph, level = 53

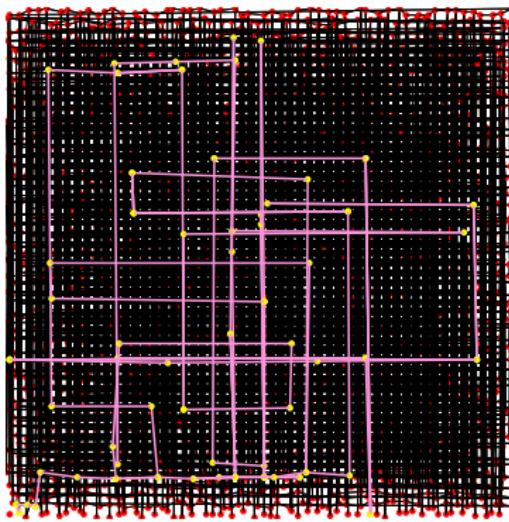


Figure: Margulis graph, level = 53, steps = 100

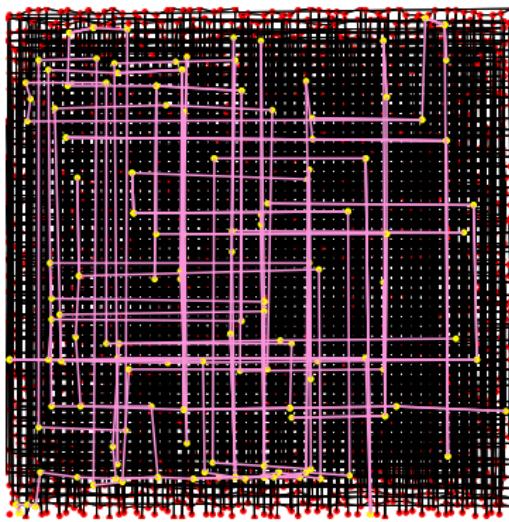


Figure: Margulis graph, level = 53, steps = 200

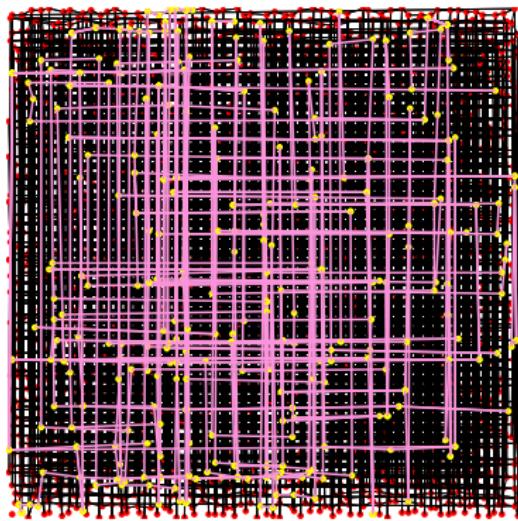


Figure: Margulis graph, level = 53, steps = 400

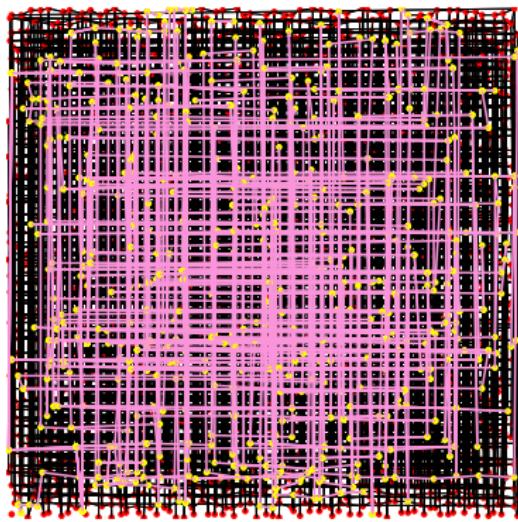


Figure: Margulis graph, level = 53, steps = 800

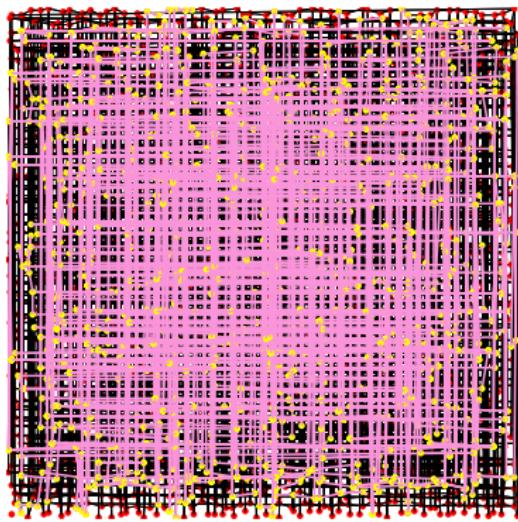


Figure: Margulis graph, level = 53, steps = 1600

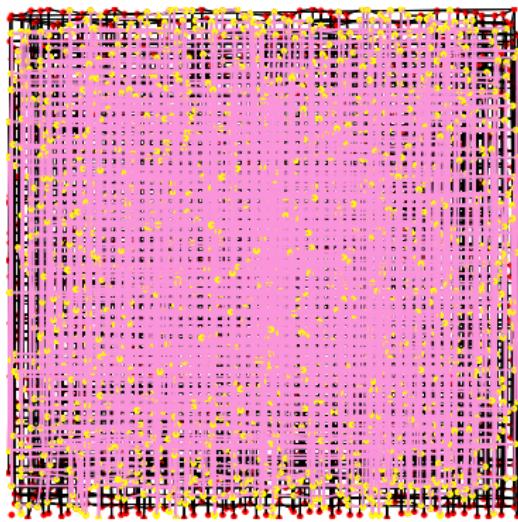


Figure: Margulis graph, level = 53, steps = 3200

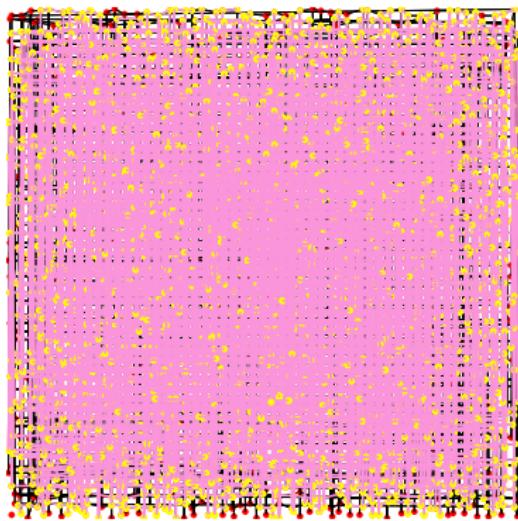


Figure: Margulis graph, level = 53, steps = 6400