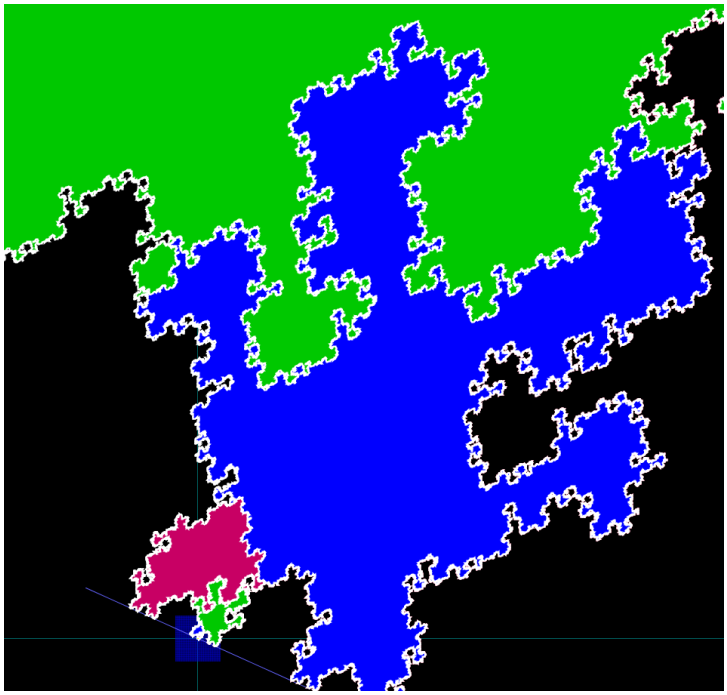
The Oliver Club

www.math.cornell.edu/~oliver/

Richard Schwartz, Brown University

Polygonal Outer Billiards

Polygonal outer billiards is a geometrically inspired dynamical system in which a point travels around the outside of a convex polygon, according to a simple rule. Even for very simple polygons, the system produces very intricate patterns and tilings of the plane. I will survey the main results in this subject, including my own results, concentrating on the themes of quasi-periodicity, higher dimensional compactification, and renormalization. I will illustrate the ideas with vivid computer demos.



Thursday, November 17, 2011
at 4:25 PM in 406 Malott Hall

Refreshments will be served at 3:55 PM in the Mathematics Department lounge (532 Malott Hall).