Michigan Math Club Thursday at 4pm in the Nesbitt Room Free Pizza and Pop Mating Habits of

Polynomials

Sarah Koch

Abstract for 3 October

Given two suitable complex polynomial maps, one can construct a dynamical system by mating the polynomials; that is, by gluing together the Julia sets of the polynomials in a meaningful way. In this talk, we focus on quadratic polynomials --- we begin with a brief discussion of parameter space for quadratic polynomials (where the Mandelbrot set lives), we then define the mating of two quadratic polynomials, and finally we explore examples where the mating does exist, and examples where it does not.



