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Mathematics Colloquium

A disconnected deformation space of rational maps

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Abstract

For postcritically finite rational maps, Thurston showed that the space of combinatorially equivalent maps is connected. This space can be thought of as a deformation space for a postcritically finite map f. A. Epstein extended this notion to include the case when f maps a subset A of a finite set B containing the critical values of f into B, showing that the deformation space forms a complex submanifold of the Teichmueller space of B points in the Riemann sphere. In this talk I present joint work with Sarah Koch in which we show that in this general setting the deformation space may be disconnected. Our proof relies on an analysis of the fundamental group of a certain plane curve complement.

Wednesday, 28 February 2018, 4pm

Smith Hall 204

Tea and refreshments will be served at 3:45pm.