Philadelphia Area Number Theory Seminar

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Dynamics of Apollonian Circle Packings

Abstract: In this talk we construct a dynamical system on the unit sphere which in particular allows one to read off the word corresponding to any Descartes quadruple. A Descartes quadruple is a quadruple of curvatures (inverse radii) of any collection of four circles which are pairwise mutually tangent, with disjoint interiors. The motivation to study this comes from works of Romik, and others on dynamics on a tree of Pythagorean triples.

Wednesday, June 3, 2016 2:40–4:00PM

Bryn Mawr College Department of Mathematics Park Science Center **328** Tea and refreshments at 2:20PM in Park 355