RUTGERS

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Mathematics Colloquium

Polyhedra inscribed in quadrics and their geometry

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Abstract

In 1832 Steiner asked for a characterization of polyhedra which can be inscribed in quadrics. In 1992 Rivin answered in the case of the sphere, using hyperbolic geometry. In this talk, I will describe the complete answer to Steiner's question, which involves the study of interesting analogues of hyperbolic geometry including anti de Sitter geometry. Time permitting, we will also discuss future directions in the study of convex hyperbolic and anti de Sitter manifolds. This is joint work with J. Danciger and J.-M. Schlenker.

Wednesday, 20 January 2016, 4pm

Smith Hall 204

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