

Geometry, Groups and Dynamics/GEAR Seminar  
(held at the Illinois hub of GEAR )

**Tuesday, January 20, 2015, 1:00 pm in 243 Altgeld Hall**

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Thin Monodromy Groups

Abstract: In recent years, it has become interesting from a number-theoretic point of view to be able to determine whether a finitely generated subgroup of  $GL_n(\mathbb{Z})$  is a so-called thin group. In general, little is known as to how to approach this question. In this talk we discuss this question in the case of hypergeometric monodromy groups, which were studied in detail by Beukers and Heckman in 1989. We will convey what is known, explain some of the difficulties in answering the thinness question, and show how one can successfully answer it in many cases where the group in question acts on hyperbolic space. This work is joint with Meiri and Sarnak.

[Video](#)