



DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE

## Colloquium

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### CONSTRUCTION OF PSEUDO-ANOSOV MAPS AND A CONJECTURE OF PENNER

**Prof. Balazs Strenner (IAS)**

#### ABSTRACT

The first half of the talk will be an introduction into mapping class groups of surfaces and their connections to other areas in low-dimensional topology. In particular, I will explain what pseudo-Anosov mapping classes are, and how to construct them using a method of Penner.

The second half be about the conjecture of Penner that all pseudo-Anosov mapping classes have a power arising from the above construction. I will sketch the proof (joint work with Hyunshik Shin) that the conjecture is false for most surfaces. The techniques are elementary, and the talk should be accessible to graduate and undergraduate students.

**Wednesday, 18 November 2015**

**4:00 pm**

**Smith Hall 204**

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

<http://math.newark.rutgers.edu/~xiaowwan/Colloquium/>