

NYC Dynamics Seminar at CUNY & Yeshiva University

Ren Yi (Brown University)

will speak on

The golden ratio triple lattice PETs

Wednesday, November 30th, 5:00pm

Lectures will last 1 hour and be followed by questions and/or discussion.

Yeshiva University, 215 Lexington Ave, Room 506

On the SW corner of Lexington Ave and 33rd Street. You will need to sign in.

Abstract:

Polytope exchange transformations (PETs) are higher dimensional generalizations of interval exchange transformations (IETs) which have been well-studied for more than 40 years. A general method of constructing PETs based on multigraphs was described by R. Schwartz in 2013. The triple lattice PETs are examples of multigraph PETs.

In this talk, I will show that there exists a renormalization scheme in a neighborhood of the golden ratio in the interval $(0,1)$. I will discuss the properties of the limit set with respect to the golden ratio. Pictures and computer simulations will be presented in the talk.