

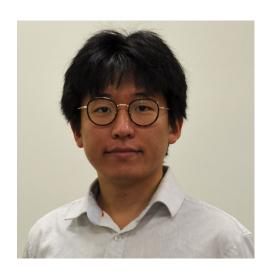


## Department of Mathematics

## Guest Speaker: Seung uk Jang University of Chicago

## Lecture Title:

Vieta Involutions on Tropical Markov Cubics



Date: Monday, July 24,

2023

**Time:** 2:00 PM

Location: 125 Hayes-Healy

Hall

**Zoom URL:** NA

## Abstract:

A recent advance on the dynamical study of Vieta involution on Markov cubics was done on a work of Rebelo and Roeder. Motivated from this, we discuss how the dynamics go if we consider the tropicalized version of it. It turns out that we get a picture that is isomorphic to the Farey tessellation (i.e.,  $(\infty, \infty, \infty)$ -triangle tessellation) on the hyperbolic plane. Some brief sketches on the technique of tropicalizations will be presented. Some further application of this "Farey picture" will be given too, proving the connection to non-archimedean questions on Markov cubics.