## **Pumagrass** October 2, 2020

## **Speaker**: Yan Sheng Ang **Title**: Computing fractal dimension: McMullen's eigenvalue algorithm

## Abstract

The various notions of fractal dimension form an important class of invariants for limit sets of dynamical systems. In this talk, I will motivate the definition of the self-similarity dimension by looking at examples of linear iterated function systems, and extend it to the conformal case, building up to McMullen's 1998 algorithm to numerically compute the dimension of limit sets of Kleinian groups and Julia sets of rational maps.