

## Graduate Student Colloquium

### *The $p$ -adic Mandelbrot Set and Other Peculiarities of Arithmetic Dynamics*

Cara Mullen (UIC)

**Abstract:** The goal of this talk is to introduce the subject of  $p$ -adic dynamics: the study of dynamics over a field that is complete with respect to a nonarchimedean absolute value. We will discuss some of the major results, with a little motivation from classical complex dynamics. No previous knowledge of dynamical systems or number theory will be assumed.

Monday, November 30 at 4:00 PM in BH 209