

## Colloquium

April 9, 3:00 p.m.  $(8^{th} \text{ Period})$  (in the Atrium)

Speaker: Recep Celebi

**Title**: The Nottingham Group and Wild Automorphisms of Local Fields

## **Abstract**

The Nottingham group consists of formal power series over a finite field, with no constant term and linear coefficient 1, with composition as the group operation. It arises naturally as the group of wild automorphisms of a local field of characteristic p and has deep roots in ramification theory. Later, group theorists recognized it as a universal pro-p group, one into which every finite p-group embeds, and began studying its rich internal structure. In this talk, I will introduce the Nottingham group and outline how it became a central object of study in both number theory and group theory.