

Colloquium

October 5, 4:05 p.m. (9^{th} Period) (in the Atrium)

Speaker: Recep Celebi

Title: A Brief Tour of Local Class Field Theory

Abstract: A local field is a field which is complete with respect to a discrete valuation with a finite (or more generally, perfect) residue field. Some examples are the field \mathbf{Q}_p of p-adic numbers and the field of Laurent series over a finite field. Local class field theory (LCFT) studies abelian extensions of local fields. In this talk, I will introduce some basic terminology of local fields along with examples, and provide the main statements of LCFT. I will also try to motivate the historical development of the subject.