Speaker: Özlem Ejder, Boğaziçi University

Title: Galois Theory of Rational Maps

Abstract:
Let $f : \mathbb{P}^1_K \to \mathbb{P}^1_K$ be a rational map defined over a number field $K$. The Galois theory of the iterates $f^n = f \circ \ldots \circ f$ has applications both in number theory and arithmetic dynamics. In this talk, we will discuss the various Galois groups attached to the iterates of $f$, namely arithmetic and geometric monodromy groups and Arboreal Galois representations. While providing a survey of recent results on the subject, we will also talk about joint work with I. Bouw and V. Karemaker on Dynamical Belyi maps.