

Philadelphia Area Number Theory Seminar

Bharathwaj Palvannan
University of Pennsylvania

On free resolutions of Iwasawa modules

Abstract: The topic of the talk is related to non-commutative Iwasawa theory and is motivated by certain (conjectural) integrality properties of the p -adic L -function. We will discuss certain non-primitive Iwasawa modules that have a free resolution of length one over the completed group ring $Z_p[[H]]$. Here, H is the Galois group of a finite Galois extension $L=K$ of totally real fields and Γ is the Galois group of the cyclotomic extension $K_1=K$. If time permits, we will consider an application of this