

**Speaker:** Bharathwaj Palvannan

**Title:** Codimension two cycles in Iwasawa theory

**Abstract:** Classical Iwasawa theory studies a relationship, called the Iwasawa main conjecture, between a  $p$ -adic  $L$ -function and a Selmer group. This relationship involves codimension one cycles of an Iwasawa algebra. This talk will discuss two results on the topic of higher codimension Iwasawa theory. We will consider the restriction to an imaginary quadratic field of an elliptic curve defined over the rational numbers with good supersingular reduction at an odd prime. We will also consider the tensor product of Hida families. This is joint work with Antonio Lei.