Corey Stone*, 4066 Brant St, San Diego, CA 92103. Higher Fitting Ideals of Iwasawa Modules.

In their 1984 paper, Mazur and Wiles proved the Iwasawa main conjecture, which says that the initial (zeroth) Fitting ideal of the classical Iwasawa module associated to an abelian extension of \( \mathbb{Q} \) is generated by a \( p \)-adic L-function. Since then, other authors have proven main conjectures for various other fields, and have used them to attack other conjectures in number theory. In a 2003 paper, Kurihara formulated an extension of the main conjecture, asking how the higher Fitting ideals are generated by special values of \( L \)-functions, and proving his conjecture for the first Fitting ideal of certain abelian extensions of \( \mathbb{Q} \). In this talk, we will give a proof of this conjecture for all of the higher Fitting ideals in the case when the base field is \( \mathbb{Q} \) (Received July 18, 2017)