1163-11-1346 Jeffrey Hatley* (hatleyj@union.edu) and Antonio Lei. Comparing positive rank Iwasawa modules.

Iwasawa theory provides a powerful method of studying Selmer groups associated to elliptic curves and modular forms. For a long time, many results have assumed that these Selmer groups were (co)torsion modules for the Iwasawa algebra $\Lambda = \mathbb{Z}\llbracket T \rrbracket$. This assumption frequently holds case when dealing with the cyclotomic \mathbb{Z}_p -extension of \mathbb{Q} . On the other hand, when considering an anticyclotomic \mathbb{Z}_p -extension K_{∞}/K of an imaginary quadratic field K/\mathbb{Q} , these Selmer groups often have positive (co)rank. This talk will discuss recent work with Antonio Lei which develops tools for studying this situation in a manner akin to the (co)torsion setting. (Received September 15, 2020)