THE UNIVERSITY   **OF HONG KONG**

Institute of Mathematical Research
Department of Mathematics

Number Theory Seminar

On fine Selmer group

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Abstract

The fine Selmer group has been a much studied object in Iwasawa theory. Despite that a systematic study of the group was only initiated by Coates-Sujatha and Wuthrich in the 2000s, the said group has already occurred in many prior works before the turn of the millennium. In the first part of the talk, we give a brief account of this development and the so-called Conjecture A raised by Coates-Sujatha, which is closely related with a certain classical conjecture of Iwasawa. This part of the talk is mainly concerned with fine Selmer group over cyclotomic Z_p-extension. In the second part of the talk, we will move to the fine Selmer group over an arbitrary Z_p-extension, where we discuss certain folklore conjecture/prediction on the structure of these fine Selmer groups and show that they are related to the so-called Conjecture B of Coates-Sujatha.

Date:	October 24, 2022 (Monday)
Time:	3:30 – 4:30pm
Venue:	ZOOM: https://hku.zoom.us/j/
	Meeting ID: 232 576 6007

All are welcome