

The logo for SIMBa, featuring the text "SIMBa" in a bold, black, serif font on a solid orange rectangular background.

BGSMath
BARCELONA GRADUATE
SCHOOL OF MATHEMATICS

Seminari Informal de Matemàtiques de Barcelona

Speaker: Marta Sánchez Pavón.
University: Universidad de Sevilla.

Date: Wednesday, April 21st, 2021.
Schedule: 12:00, *virtual coffee break*; 12:20, talk.
Place: Zoom (the link will be posted on our website).
Language: English.

Title: Entering the tower with Iwasawa theory

Abstract: Proving Fermat Last Theorem has been one of the most famous mathematical challenges during the last years. Most importantly, it served as a key starting point for developing deep theories in arithmetic geometry; and Iwasawa theory has been one of such. The fundamental idea of Iwasawa theory is studying the growth of arithmetic objects (such as the ideal class group of number fields or Selmer groups of elliptic curves and abelian varieties) in an infinite tower of p -adic extensions. Furthermore, much of the recent progress in the Birch and Swinnerton-Dyer conjecture is due to these methods. In this talk, we present a brief introduction to Iwasawa theory with an eye on elliptic curves.

About us: *SIMBa* is a youth mathematics seminar organized by graduate students in the Barcelona area. It is aimed towards graduate and last course undergraduate students. Our goals are divulging the knowledge from different branches of mathematics for those interested and promote networking between the attendants.

This seminar is backed by the Faculty of Mathematics and Computer Science at Universitat de Barcelona, Faculty of Mathematics and Statistics at Universitat Politècnica de Catalunya, the Department of Mathematics from Univesitat Autònoma de Barcelona, CRM, IMUB and BGSMath.

Fore more information, visit at www.ub.edu/simba/en/.

If you have any doubt or comment do not hesitate to contact us by sending an email to seminari.simba@gmail.com.