

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

Seminari Informal de Matemàtiques de Barcelona

Speaker: Enric Florit Zacarías.

University: Universitat de Barcelona.

Date: Wednesday, June 3rd, 2020.

Schedule: 12:00, *virtual coffee break*; 12:20, talk.

Place: Zoom (the link will be posted on our website).

Language: English.

Title: Superspecial isogeny graphs in genus 2

Abstract: Supersingular isogeny graphs allow us to formulate supposedly post-quantum protocols, based on the fact that we don't have efficient algorithms to find isogenies between curves. These graphs are expanders and Ramanujan; in particular, the stationary distribution of the random walk is (essentially) uniform. After defining these notions, we will talk about the generalization of these graphs with hyperelliptic genus 2 curves, and we will explain some properties appearing in this case and the differences with elliptic curve graphs.

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.