Seminari Informal
de Matemàtiques de Barcelona

Speaker: Shehzad Hathi.
University: UNSW Canberra at ADFA.

Date: Wednesday, June 1st, 2022.
Schedule: 11:00, *virtual coffee break*; 11:20, talk.
Place: UB (FMI aula B1) and Zoom.
Language: English.

Title: The LLL algorithm and its application to number theory

Abstract: The Lenstra-Lenstra-Lovász algorithm is a polynomial-time algorithm to find a short and nearly orthogonal basis of a lattice. Besides applications in cryptanalysis, it was also used by Odlyzko and te Riele (in 1985) to disprove Merten's conjecture. We will look at how this algorithm can be adapted for a number-theoretic problem like Merten's conjecture.

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 knoweledge 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*.