

The logo for SIMBa, consisting of 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: Sergio García Rodrigo.

University: Universidad Autónoma de Madrid.

Date: Wednesday, March 15th, 2023.

Schedule: 13:00, *virtual coffee break*; 13:20, talk.

Place: UB (FMI aula B1) and Zoom.

Language: English.

Title: An introduction to Khovanov homology and annular links

Abstract: This talk will provide an overview of knot theory, a subfield of algebraic topology that seeks to understand the properties of knots and links through the study of their invariants. Specifically, we focus on two essential invariants in knot theory, namely, the Jones polynomial and its categorification, the Khovanov homology. Furthermore, we introduce a variation of classical links, known as annular links, which exist in the solid torus instead of \mathbb{R}^3 . We then proceed to explore the annular versions of both the Jones polynomial and the Khovanov homology.

About us: *SIMBa* is a 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.