

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: Lucas Queiroz Arakaki.
University: São Paulo State University (UNESP).

Date: Wednesday, February 22nd, 2023.
Schedule: 13:00, *virtual coffee break*; 13:20, talk.
Place: UAB (aula petita CRM) and Zoom.
Language: Catalan.

Title: The Nilpotent Center Problem on Center Manifolds in \mathbb{R}^3

Abstract: We work with systems of differential equations which have a nilpotent singular point at the origin on a Center Manifold. We study the formal integrability and the center problem for those types of singular points in the monodromic case. Our approach does not require polynomial approximations of the Center Manifold in order to study the center problem.

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.