

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

BGSMath
BARCELONA GRADUATE
SCHOOL OF MATHEMATICS

Seminari Informal de Matemàtiques de Barcelona

Speaker: Begoña Nicolás.

University: Universitat de Barcelona.

Date: Wednesday, December 1st, 2021.

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

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

Language: English.

Title: Invariant manifolds and transport in an Earth-Moon system perturbed by Sun's gravity field

Abstract: The mathematical model we use to study the Sun-Earth-Moon system is the Bicircular Problem (BCP), that can be thought as a time-periodic perturbation of the autonomous system described by the Restricted Three-Body Problem (RTBP). Our main concern on the BCP is regarded to a family of two-dimensional quasi-periodic solutions that have stable and unstable invariant manifolds associated. These manifolds give the skeleton for different dynamical transport phenomena that take place in our system.

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.