Seminari Informal
de Matemàtiques de Barcelona

Speaker:	Jordi Daura.
University:	Universitat de Barcelona.
Date:	Wednesday, May 28th, 2025.
Schedule:	13:00 talk.
Place:	UB (FMI aula IA) and Zoom.
Language:	English.
Title:	Spin structures II: Homogeneous spaces.

Abstract: This talk is the second part of the talk "Spin structures: Refining orientability". We will further discuss the topological obstruction to the existence of spin structures, giving some examples of simply connected 4-manifolds not admitting a spin structure. In the second part of the talk, we will study the interaction between spin structures on a manifold M and group actions of compact Lie groups on M. We will focus on the case where the compact Lie group act transitively and, in particular, we will show when the unique spin structure on a sphere is invariant by the different compact Lie groups acting transitively on it (joint work with Michael Kohn and Marie-Amélie Lawn).

About us: *SIMBa* is a mathematics seminar organized by graduate students in the Barcelona area. It is aimed towards graduate and last–year undergraduate students. Our goals are disseminating knowledge from different branches of mathematics for those interested and promoting 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 at Universitat Autònoma de Barcelona, CRM, IMUB and BGSMath.

Fore more information, visit seminari-simba.github.io/en. You may contact us by sending an email to ***seminari.simba@gmail.com***.