**Seminari Informal de Matemàtiques de Barcelona**

**Speaker:** Irene Macías Tarrío.  
**University:** Universitat de Barcelona.  
**Date:** Wednesday, February 28th, 2024.  
**Schedule:** 13:00, coffee break; 13:20, talk.  
**Place:** UB (aula B3) and Zoom.  
**Language:** English.  
**Title:** Moduli spaces of stable vector bundles

**Abstract:** Moduli spaces are essential constructions that arise in connection with classification problems. When dealing with vector bundles on a smooth algebraic variety $X$, the moduli space of stable vector bundles parametrizes isomorphic classes of stable vector bundles. This talk will start with the definition and construction of this moduli space from the point of view of algebraic geometry. After this there will be an overview of the Brill-Noether Theory, which concerns the study of certain subvarieties of this moduli space in order to know more about its geometry.

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**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 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 from Universitat Autònoma de Barcelona, CRM, IMUB and BGSMath.


If you have any doubt or comment do not hesitate to contact us by sending an email to seminari.simba@gmail.com.