Seminari Informal
de Matemàtiques de Barcelona

Speaker:	Robin Simoens.
University:	Universitat Politècnica de Catalunya.
Date:	Wednesday, January 10th, 2024.
Schedule:	13:00, *coffee break*; 13:20, talk.
Place:	UPC (FME aula 005) and Zoom.
Language:	English.
Title:	Coding theory: into the quantum world

Abstract: Classical error-correcting codes were introduced in 1950 by Richard Hamming and are now well-developed. They are built upon the idea of adding redundant information to protect against errors. In 1995, Peter Shor showed that this idea can be carried into the quantum world, giving rise to quantum error-correcting codes, which play a central role in the realisation of quantum computers. In this talk, I will give an introduction to both classical and quantum codes, pointing out their differences and similarities.

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 Univesitat Autònoma de Barcelona, CRM, IMUB and BGSMath.

Fore more information, visit at `https://seminari-simba.github.io/en`seminari-simba.github.io/en.

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