



Seminario de Álgebra, Geometría algebraica y Singularidades  
La Laguna, 20 de septiembre de 2022, 16:00 horas (GMT+1)

## Rank-Metric Codes: From Networks to Semifields

**Alberto Ravagnani**  
Eindhoven University of Technology<sup>1</sup>

This talk offers an introduction to rank-metric codes and touches upon very recent developments in the field. I will start with an overview on network coding, the context in which rank-metric codes find their main application. I will then illustrate some open problems about the mathematical structure of rank-metric codes and partial solutions, which link to fundamental questions in algebraic combinatorics and semifield theory.

<sup>1</sup>Department of Mathematics and Computer Science  
Eindhoven University of Technology  
Eindhoven, Netherlands  
[a.ravagnani@tue.nl](mailto:a.ravagnani@tue.nl)