## Al@Bicocca seminar

You are all welcome to the next bite of the series

### "Al@Bicocca"

which is meant to give you a small taste of the Algebra at Bicocca and beyond

Victor Ortiz Sotomayor

Universitat Politècnica de València

# Finite groups and their multisets of class sizes and character degrees

**Abstract:** The set of conjugacy class sizes of a finite group encodes significant structural information, although certain properties —such as nilpotency, solubility, or even the group order— remain undetectable when considering this set alone. A more refined invariant arises by viewing the conjugacy class sizes as a multiset, i.e. incorporating the frequency of each class size.

In this seminar, we will survey results concerning how this additional data determines certain structural features. Particular emphasis will be placed on recent progress and on analogies with the multiplicities of irreducible characters degrees.



26 May 2025 11.00 (CEST)

### Online venue: WebEx

University of Milano-Bicocca Via R. Cozzi 55 Milano (IT)

#### Organizers:

Marco Barbieri Marco Fusari Nicola Grittini Ettore Marmo Francesco Matucci Matteo Tarocchi

Website 🌘