

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

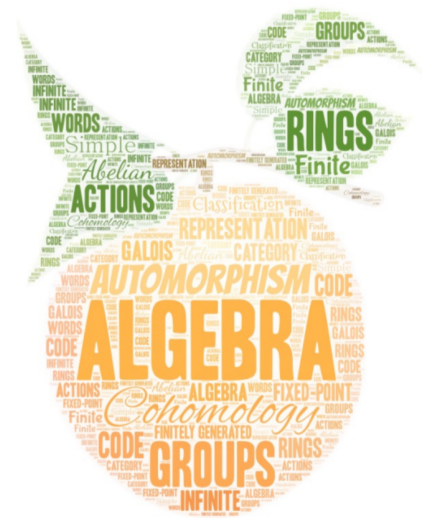
Daniele D’Angeli

Università Niccolò Cusano

Spectral properties of the Pauli groups

Abstract: The Pauli groups P_n are generalizations of the famous Pauli group P_1 involved in quantum mechanics and the formulation of the celebrated Pauli Exclusion Principle. In this talk, I will show how to obtain these groups as iterated central products and this brings out a natural generating system S_{P_n} for such groups which differs from the standard one.

Using this approach, we are able to recursively construct the adjacency matrix of $\text{Cay}(P_n, S_{P_n})$ for each $n \geq 1$, and to explicitly describe its spectrum and the associated eigenvectors. Then, some remarkable properties of this spectrum and some interesting consequences regarding representation theory are discussed.



21 November 2024

14.00 (UTC+1)

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 