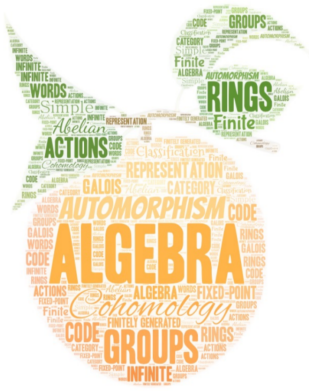
Al@Bicocca seminar

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



13 July 2026
15.00 (CEST)

Ilaria Viglino
École Polytechnique Fédérale de Lausanne — EPFL

Moment estimates of module lattice points for effective lattice constructions

Abstract: We examine the moments of the number of lattice points in a fixed ball of volume V for lattices in Euclidean space which are modules over the ring of integers of a number field K. In particular, we show that moments obtained for "lifts of codes" to $\mathcal{O}_K$-modules converge to the Rogers integral formula for the space of free $\mathcal{O}_K$-module lattices. This extends work of Rogers for $\mathbb{Z}$-lattices. Joint work with Maryna Viazovska, Nihar Gargava and Vlad Serban.

Online venue: Webex
University of Milano-Bicocca
Viale dell'Innovazione, 10
Edificio U9
Milano (IT)
Aula U9-08

Organizers:
Jessica Anzanello
Julian Feuerpfeil
Marco Barbieri
Simone Blumer
Nicola Grittini
Francesco Matucci

Website