

# 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 Algebra at Bicocca  
and beyond

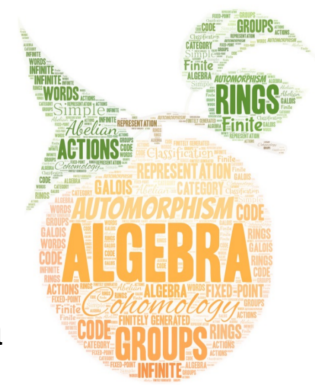
Giles Gardam

University of Bonn

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## The Kaplansky conjectures

**Abstract:** There is a series of four fundamental and long-standing conjectures on group rings attributed to Kaplansky: the unit, zero divisor, idempotent and direct finiteness conjectures. The zero divisor conjecture, for example, states that the group ring of a torsion-free group with field coefficients has no zero divisors. I will discuss these conjectures, their connections to other open questions in various areas of mathematics, and the disproof of the unit conjecture.



2nd of October 2025

15.00 (CEST)

Online venue: WebEx

University of Milano-Bicocca  
V.le dell'Innovazione, 10,  
Edificio U9  
Milano (IT)

**Organizers:**

Jessica Anzanello  
Julian Feuerpfeil  
Marco Barbieri  
Nicola Grittini  
Ettore Marmo  
Francesco Matucci  
Matteo Tarocchi

Website 