## Al@Bicocca seminar

You are all welcome to the next "Al@Bicocca Flash Workshop!"

with two algebra seminars, at Bicocca

10.30 - 11.30:

Arnaud Brothier University of Trieste and UNSW Sydney

## Vaughan Jones' reconstruction program and infinite groups

**Abstract:** In his quest in constructing conformal field theories (CFT) from subfactors Vaughan Jones found an unexpected connection with Richard Thompson's group T. This led to Jones' technology: a powerful method for constructing actions of certain groups.

I will present the great lines of Jones' fascinating connection and will mention various applications of it in group theory, (operator) algebras and so on.

I will end by introducing forest-skein groups which sit at the intersection of all these areas and ideas.

11.30 - 12.30:

Ryan Seelig UNSW Sydney

## Finitely presented simple groups with no piecewise projective actions

**Abstract:** Following on from the previous talk, we investigate an explicit class of examples of forest-skein (FS) groups. We show they act naturally on the circle by orientation-preserving homeomorphisms, are finitely presented, and are simple. Surprisingly, we will show these examples admit no piecewise projective, and hence no piecewise affine, actions on the circle. This is in stark contrast to previous examples of such simple groups in the literature. Finally, using powerful dynamical techniques of Rubin and McCleary, we are able to distinguish infinitely many isomorphism classes in our class of examples. This is joint work with Arnaud Brothier.



10 July 2025 10.30 (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 🏶