

Announcement

Seminar on Deformation Quantization and Geometry

16.07.2026 at 11:00 s.t.

Seminarroom TBD

ALEX ELZENAAR (MONASH UNIVERSITY)

What do knots have to do with algebra?

Hyperbolic manifolds, braids, and knots are interesting because they provide useful pictures of linear representations of groups. Here, ‘useful’ means ‘can be used to prove things about the representation theory’. We explain a couple of ways of encoding and decoding between algebraic and visual/geometric data, focusing on the relationship between angle-preserving actions of groups on the sphere and a family of knots with very simple combinatorial structure (those with ‘tunnel number 1’). We will be particularly interested in different kinds of rigidity and flexibility of these groups, starting only from very basic building blocks like symmetric patterns of circles in the plane.

Invited by Madeleine Jotz