

Mathematisches Kolloquium

Mittwoch, 9. Jänner 2019 Sky Lounge

EINLADUNG

Anthony Licata (Australian National University)

"Khovanov's Heisenberg category"

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Abstract:

The Heisenberg algebra, defined by operators p and q satisfying the relation qp = pq+1, plays an important role in various parts of representation theory and mathematical physics. In 2010, Khovanov defined a monoidal category with objects P and Q, with morphisms that give rise to an isomorphism QP \cong PQ \oplus 1. Khovanov's category is deceptively simple to define, though it's not really obvious from the definition why it should be an interesting thing to study. But from this category emerges a tremendous amount of interesting mathematics,

touching on subjects such as representation theory of symmetric groups, free probability, and conformal field theory. The goal of this talk will be to explain Khovanov's definition and describe at least some of the interesting mathematics that emerges from it.

14.45 Uhr: Kaffeejause

15.15 Uhr: Vortrag

vinum cum pane im Anschluss

Nils Carqueville Anton Mellit Christian Krattenthaler