



universität
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Fakultät für Mathematik

Mathematisches Kolloquium

Mittwoch, 10. Mai 2023

Sky Lounge

EINLADUNG

Ben Davison

(University of Edinburgh)

„Kac polynomials: between combinatorics and algebra“

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Abstract:

If Q is a finite directed graph, a representation of it is given by a set of vector spaces at the vertices and a set of linear maps for the arrows. Fixing the dimensions of these vector spaces, and working over a finite field, we can count the number of isomorphism classes of absolutely indecomposable representations, and Kac proved that this count is a polynomial in the cardinality of the field, the resulting polynomial is the Kac polynomial.

These polynomials turn out to have links with problems across combinatorics, geometry, representation theory and beyond. This talk will attempt to cover some of these, while also presenting some of the latest algebraic results concerning these polynomials.

14.45 Uhr: Kaffeejause

15.15 Uhr: Vortrag

Vinum cum pane im Anschluss

Anton Mellit
José Luis Romero
Radu Ioan Boț