

Einladung

Würzburger Mathematisches Kolloquium

Julius-Maximilians-Universität Würzburg • Institut für Mathematik

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Necklaces, Finite Fields and Lie Algebras

Dienstag, 7. Februar 2023 • 14:15 Uhr

Seminarraum 00.006 • Forschungsbau (Emil-Fischer-Straße 41, 97074 Würzburg)

Der Vortrag wird auch Zoom-Meeting übertragen: go.uni-wue.de/ifmcolloquium-zoom

Abstract. Necklace polynomials were introduced by Colonel C. P. N. Moreau in the second half of the 19th century as a device for counting the number of primitive necklaces of length n made up by beads of r different colours. These polynomials show also up considering the number of irreducible polynomials over a finite field F . Surprisingly, these polynomials also allow to calculate the dimensions of the homogeneous components of a graded Lie algebra of type FP using the eigenvalues of the Poincaré polynomial. This generalises E. Witt's formula to all Lie algebras of type FP .

