Leibniz Universität Hannover

Oberseminar
zur
Algebra und Algebraischen Kombinatorik

Prof. Dr. Martin Rubey

Leibniz Universität Hannover

"0-1-fillings of moon polyominoes and rc-graphs"

Maximal 0-1-fillings of moon polynomials, with restricted chain lengths, are a common generalisation of (multi)-triangulations and (fans of) Dyck paths. RC-graphs, also known as pipe dreams, are combinatorial objects which encode Schubert polynomials, i.e., certain representatives for the cohomology class corresponding to a Schubert variety.

We show that the fillings mentioned above can be identified with certain rc-graphs. This has numerous consequences, in particular it entails a bijective proof of the fact that the number of maximal fillings of a stack polyomino S with no north-east chains longer than k depends only on k and the multiset of column heights of S.

Montag, 10.01.2011
ab 14:00 Uhr, Raum a410

Hauptgebäude der Leibniz Universität Hannover

Alle Interessierten sind herzlich eingeladen.

gez. Prof. Dr. C. Bessenrodt

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