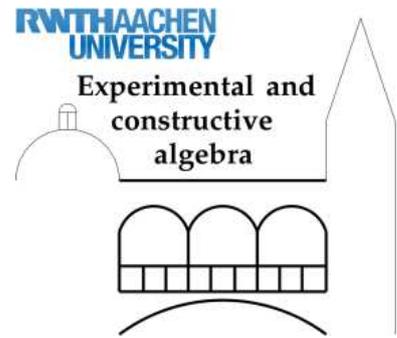Experimental and
constructive
algebra

Kolloquiumsvortrag

Dienstag, 31. Mai 2016, 14:00 Uhr, SeMath

Anna Mkrtchyan (Universität Bonn):
Surprising divisibility in group theory

Generalizing Solomon's theorem, Gordon and Rodriguez-Villegas have proven recently that, in any group, the number of solutions to a system of coefficient-free equations is divisible by the order of this group whenever the rank of the matrix composed of the exponent sums of i-th unknown in j-th equation is less than the number of unknowns. We generalize this result in a few directions: first, we consider equations with coefficients, secondly, we consider not only systems of equations but also any first-order formula in the group language (with constants), finally, we replace equalities in formulas with inclusion in arbitrary subgroups.

Wir laden alle Interessierten herzlich ein.