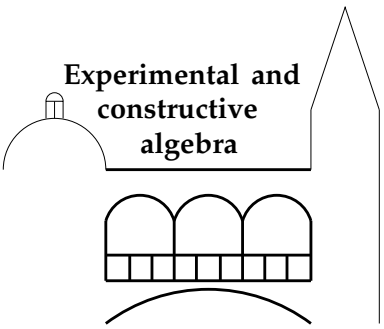
Graduiertenkolleg

Experimentelle und konstruktive Algebra



Kolloquiumsvortrag

Dienstag, 11. Juli 2017, 14:00 Uhr, SeMath

Marvin Krings (Lehr- und Forschungsgebiet Algebra):
Sylow Subgroup of Primitive Permutation Groups

Let P be a Sylow p-subgroup of a finite primitive permutation group G. Our aim is to compute bounds for the derived length and nilpotency class of P. First we determine bounds for the case that G is not necessarily primitive, but a general linear group or a symmetric group. Then we consider a primitive permutation group G. We use the O'Nan-Scott Theorem in the version of Liebeck, Praeger and Saxl and give separate bounds for each of its cases. For almost simple groups, we additionally give specific bounds for the case that the underlying simple group T is an alternating, projective symplectic or sporadic group. The Wreath Product Cases are not considered in detail; we only give some rough estimates as bounds in these cases.

Wir laden alle Interessierten herzlich ein.