ICM 1998, Berlin, Aug. 18–27

Abstracts of Short Communications and Posters

Section:

13. Combinatorics

1991 MS Classification: not given

Crapo, Henry, Le Conte de Poly-Barbut, Claude, C. A. M. S., Paris, France

Mirrors and Convexity in Coxeter Groups

Convexity properties of the configuration of positive roots of a Coxeter system determine the semilattice order on the roup and gives algorithmic access to the set of reduced words for any element. These configurations are in general non-constructable, having no rational coordinatization, but are significant as projective figures. In that they model a number of otherwise inaccessible projective theorems concerning what might be called 'projective regularity. '