

MA386 Jan 3:0

Coxeter Groups

Instructor

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Teaching Assistant

Email:

Department: Mathematics Course Time: Lecture venue: Detailed Course Page:

Announcements

Brief description of the course

Elective. An introduction to the theory of Coxeter groups.

Prerequisites

None, but a familiarity with algebra, linear algebra and finite groups would be helpful

Syllabus

Reflection groups and their generalisations, Coxeter systems, permutation representations, reduced words,

Bruhat order, Kazhdan-Lusztig theory, Chevalley's theorem, Poincare series, root systems, classification of

finite and affine Coxeter groups

Course outcomes

Learn basis of the theory of Coxeter groups

Grading policy

5% – Attendance

15% – Homeworks

30% – Midterm

50% – Final

Assignments

Resources