To the discovery of permutation groups: applications of CFSG and bases

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May 18, 2023 at 13:30, room 1BC45

Abstract

This is the last meeting in a cycle of four seminars about permutation groups.

The first part of the seminar will be focused on the Classification of finite simple groups (CFSG), giving a brief explanation and exposing some interesting applications, in particular regarding transitive and primitive groups.

The second part will concern the study of bases in permutation groups. We will present some useful bounds on the size of such bases, a "greedy algorithm" to obtain them and, finally, explore the concepts of geometric groups and IBIS groups.

References

[1] Cameron, Peter J. *Permutation groups.* Cambridge, Cambridge University Press, 1999.