

Algebra, Combinatorics and Number Theory Seminar

Date. Monday, July 05, 2021 - 3pm (UTC+1) ¹

Speaker. Aluna Rizzoli - Imperial College London

Title. A double coset problem for classical groups

Abstract.

Building on the classification of modules for algebraic groups with finitely many orbits on subspaces, we determine all irreducible modules for simple algebraic groups that are self-dual and have finitely many orbits on totally singular k -spaces ($k = 1$ or $k = 2$). This question is naturally connected with the problem of finding for which pairs of subgroups H, J of an algebraic group G there are finitely many (H, J) -double cosets. We provide a solution to the question when J is a maximal parabolic subgroup P_k of a classical group.

¹<https://videoconf-colibri.zoom.us/j/85917155304?pwd=ZU1YUGJRcTJzTOVjSHF5N2hNdTJQZz09>