

Speaker: Joachim Schwermer

Title: On residues of Eisenstein series - through a cohomological lens

Abstract: The cohomology of an arithmetic subgroup of a reductive algebraic group G defined over a number field k is closely related to the theory of automorphic forms. If the underlying group G/k has positive k -rank the theory of Eisenstein series plays a fundamental role in this relation. We discuss in which way residues of Eisenstein series contribute non-trivially to the subspace of square-integrable classes in these cohomology groups. The construction of cuspidal automorphic representations with prescribed local and global properties is decisive in this context.