

Eisenstein series, cohomology of arithmetic groups and some applications

Neven Grbac, University of Rijeka, Croatia

Abstract: This course is intended as a partly expository account of some results and problems concerning the cohomology of arithmetic groups, the relationship with the theory of automorphic forms, in particular, Eisenstein series. The discussion will contain the following issues:

- Automorphic forms and the cohomology of arithmetic groups,
- Space of automorphic forms and its description via Eisenstein series,
- The construction of Eisenstein cohomology classes.

The main example will be the split symplectic group Sp_4 of rank two over the field of rational numbers.