
THE WEIZMANN INSTITUTE OF SCIENCE
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE
Algebraic Geometry and Representation Theory Seminar

Room 1 ,Ziskind Building
on Monday, Jun 15, 2015at 14:05

Note the unusual day, time and place. Note that this talk will be followed by another one.
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Orbits of parabolic subgroups on generalized symmetric spaces

Abstract:

Let G be a connected reductive algebraic group defined over a field k of characteristic not 2, σ an involution of G defined over k , H a k -open subgroup of the fixed point group of σ and G_k (resp. H_k) the set of k -rational points of G (resp. H). The homogeneous space $X_k := G_k/H_k$ is a generalization of a real reductive symmetric space to arbitrary fields and is called a generalized symmetric space.

Orbits of parabolic k -subgroups on these generalized symmetric spaces occur in various situations, but are especially of importance in the study of representations of G_k related to X_k . In this talk we present a number of structural results for these parabolic k -subgroups that are of importance for the study of these generalized symmetric space and their applications.