

abstract

MEMBERS SEMINAR

Topic:

Speaker:

Affiliation:

Date:

Time/Room:

Let G be a semisimple adjoint group. There is a partition of its wonderful compactification into finitely many G -stable pieces, which was introduced by Lusztig. Each piece is a locally trivial fibration over a partial flag variety with fibres isomorphic to a product of a (smaller) reductive group with an affine space. Moreover, there is a bijection between the G -orbits on that piece and the twisted conjugacy classes on that smaller group.

In this talk, we will generalize the above results. Let σ be an involution on G and H be the subgroup of the elements fixed by σ . The quotient space G/H is a symmetric variety. We introduce a partition of its completion into finitely many H -stable pieces and show that the pieces have similar properties. If time allows, I will also discuss about the character sheaves.