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

Room 155 ,Ziskind Building
on Tuesday, Jan 22, 2019at 11:15

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Structure of degenerate principal series of exceptional groups

Abstract:

The reducibility and structure of parabolic inductions is a basic problem in the representation theory of p -adic groups. Of particular interest are principal series and degenerate principal series representations, that is parabolic induction of 1-dimensional representations of Levi subgroups.

In this talk, I will start by describing the functor of normalized induction and its left adjoint, the Jacquet functor, and by going through several examples in the group $SL_4(\mathbb{Q}_p)$ will describe an algorithm which can be used to determine reducibility of such representations.

This algorithm is the core of a joint project with Hezi Halawi, in which we study the structure of degenerate principal series of exceptional groups of type E_n (see <https://arxiv.org/abs/1811.02974>).