



THE WEIZMANN INSTITUTE OF SCIENCE  
FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Algebraic Geometry and Representation Theory Seminar

Room 155 ,Ziskind Building  
on Tuesday, Apr 30, 2019  
at 11:15

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Howe correspondance between Harish-Chandra series

Abstract:

Let  $F_q$  be a finite field with  $q$  elements and odd characteristic. A pair  $(G, G_t)$  of mutually centralized reductive subgroups of  $Sp_{2n}(F_q)$  is called a reductive dual pair. By means of the Weil representation of  $Sp_{2n}(F_q)$ , Roger Howe introduced a correspondance  $\Theta : R(G) \rightarrow R(G_t)$  between the category of complex representations of these subgroups. Here we discuss how this correspondance relates the Harish-Chandra series of  $G$  to those of  $G_t$ . If time allows, we will discuss how this correspondance can be expressed as a correspondance between unipotent Harish-Chandra series.