Transfer of Highest Weight Modules and Small Unipotent Representations

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Time: Sun, April 11th, 14:00-15:00
Venue: Room 102, Shanghai Center for Mathematical Sciences

Abstract: Let $G$ be a real reductive Lie group. It is conjectured that the `building blocks' of the unitary dual of $G$ are given by unipotent representations. In this talk, we will give some constructions of unipotent representations with small Gelfand-Kirillov dimensions. More precisely, we focus a technique called `transfer' defined by Wallach, which allows one to obtain new unipotent representations from some old ones. As a consequence, we give an account for all small unipotent representations for all real forms of $E_6$ and $E_7$.

This is a joint work with Haian He and Jing-song Huang.