Transfer of characters under the Howe duality correspondence

Abstract:

Let \( \text{Sp}(W) \times \text{O}(V) \) be a dual reductive pair. If \( \pi \) is an irreducible representation of \( \text{Sp}(W) \) say, then one may consider its theta lift \( \Theta(\pi) \) on \( \text{O}(V) \). In this talk, we discuss how the Harish-Chandra characters of \( \pi \) and \( \Theta(\pi) \) are related (when the representation of the smaller group is tempered).