Representation Parameters for Classical Groups and the Real Weyl Groups

Abstract: The Langlands Classification is a parametrization of the irreducible representations of reductive Lie groups by characters of Cartan subgroups, up to conjugacy (see David Vogan's Lecture 7). In this lecture, I will illustrate how to find this set and what it looks like, in the case of some classical groups. In particular, I will discuss the structure of the real Weyl groups which play an essential role in the parametrization.