Raul Gomez
(Cornell University)

The Tor and Ext functors for smooth representations of real algebraic groups.
January 24 (Sat) 14:30 ～ 15:30, Room 126

Abstract: Inspired by the recent work of Dipendra Prasad in the p-adic setting, we define the Tor and Ext functors for an appropriate category of smooth representations of a real algebraic group G, and give some applications. This is joint work with Birgit Speh.

Generalized and degenerate Whittaker models associated to nilpotent orbits.
January 25 (Sun) 9:30 ～ 10:30, Room 126

Abstract: In this talk, we examine the relation between the different spaces of Whittaker models that can be attached to a nilpotent orbit. We will also explore their relation to other nilpotent invariants (like the wave front set) and show some examples and applications. This is joint work with Dmitry Gourevitch and Siddhartha Sahi.

Local Theta lifting of generalized Whittaker models.
January 26 (Mon) 11:00 ～ 12:00, Room 122

Abstract: In this talk, we describe the behavior of the space of generalized Whittaker models attached to a nilpotent orbit under the local theta correspondence. This description is a generalization of a result of Moeglin in the p-adic setting. This is joint work with Chengbo Zhu.