YIANNIS SAKELLARIDIS, University of Toronto, 40 St. George Street, Toronto, ON M5S 2E4 *On the Plancherel formula for spherical varieties over p-adic fields*

Spherical varieties form a wide and interesting class of almost homogeneous spaces which includes symmetric ones. They have relevance to the Langlands program, and in fact we now have conjectures relating their spectrum to Arthur parameters of a distinguished type. I will describe several steps towards developing a Plancherel formula for spherical varieties of split groups over p-adic fields, which are in agreement with the conjectures. In many cases we obtain a Plancherel formula up to discrete spectra.

This is joint work with Akshay Venkatesh, and uses in a crucial way an unpublished argument of Joseph Bernstein.