

**September 9, 2015:** Avraham Aizenbud (Weizmann Institute), “ $\mathfrak{z}$ -finite distributions on  $p$ -adic groups.”

In the Archimedean case, the study of  $\mathfrak{z}(U(\mathfrak{g}))$ -finite distributions on a real reductive group  $G$  had many applications in representation theory and particularly in the study of characters and spherical characters. The natural analog of the center  $\mathfrak{z}(U(\mathfrak{g}))$  of the universal enveloping algebra for the non-Archimedean case is the Bernstein center  $\mathfrak{z}(G)$ . However, since there is no good geometric description of the Bernstein center, there were no results on  $\mathfrak{z}$ -finite distributions on  $p$ -adic groups, till now.

I will present two recent results on such distributions:

1) A bound on the wave front set of such distributions (similar to the standard bound on the characteristic variety of  $\mathfrak{z}(U(\mathfrak{g}))$ -finite distributions in the Archimedean case).

2) Density of  $\mathfrak{z}(G)$ -finite distributions inside some spaces of invariant distributions.

While the first result is standard in the Archimedean case, the second is still an open problem in this case.