

November 16: Stephen de Backer (University of Michigan), “Distributions attached to cuspidal local systems.” FOLLOWED BY DINNER.

For the Lie algebra of a (split) Lie group of finite type, Lusztig has described a basis for the space of class functions supported on the nilpotent set. We call the elements of this basis *generalized Green functions*. One can naturally associate to a p -adic group a finite set of finite groups of Lie type. For various reasons, it would be good to associate a very nice distribution on the p -adic Lie algebra to each generalized Green function occurring on one of these finite groups of Lie type. In particular, this distribution on the Lie algebra should be an explicit combination of regular semisimple orbital integrals. We illustrate how to carry out this task for generalized Green functions arising from cuspidal local systems.