

November 28: Monica Nevins (University of Ottawa). “On the unicity of types for supercuspidal representations.”

Types are representations of compact open subgroups which identify a Bernstein component of the category of smooth representations of a p -adic group G , by virtue of appearing in the restriction of each irreducible representation of that component and of no other. A construction of J. K. Yu gives types for supercuspidal representations; from these one can generate infinitely many more using G -conjugation and induction.

The conjecture of “unicity of types” is roughly: all types occur in this way. In this talk, we give a class of examples which disprove a stronger version of this conjecture (that types on maximal compact open subgroups are unique up to conjugacy). We nevertheless can prove the unicity conjecture for a large class of tame positive-depth supercuspidal representations of semisimple simply connected groups. This work in progress is joint with Peter Latham, King’s College, London.