November 19, 2014: Monica Nevins (University of Ottawa), Branching to a maximal compact subgroup for depth zero supercuspidal representations.

The restriction of a complex admissible representation π of a p-adic group G to a maximal compact open subgroup K decomposes into a direct sum with finite multiplicities. The simplest questions—what are these K-representations and how do they vary as a function of π ?—are wide open, in part because unlike the real case, the representation theory of groups like K is mostly unknown. In this talk, we present recent progress on these questions for depth-zero representations.