May 9: Quantizing special orbits in Sp(2n, C) (after Barbasch-Wong).

The preprint https://arxiv.org/abs/1801.06909v1 of Barbasch and Wong shows how to construct irreducible unitary representations of complex symplectic groups whose restriction to a maximal compact subgroup decompose exactly like the functions on a nilpotent coadjoint orbit; equivalently, like the normalization of the ring of functions on the orbit closure. At the same time, recent work of Jeff Adams in the atlas software makes it possible to prove similar theorems (and analogues for real reductive groups) by computer for small groups. I will discuss these results.