October 29: Roman Bezrukavnikov (MIT), "Harish-Chandra bimodules and asymptotic Hecke algebra." This is a report on a joint work with Finkelberg and Ostrik.

Structure constants of a Hecke algebra H in Kazhdan-Lusztig basis are polynomials in one variable q (or v). Lusztig discovered that the leading coefficients of these polynomials form structure constants of a new algebra over $\mathbb{Z}$ known as the asymptotic Hecke algebra J. It is well known that H is related to convolution of sheaves on the flag variety; it follows that it is also related to derived tensor product of Harish-Chandra bimodules. It turns out that J is closely related to non-derived tensor product of Harish-Chandra bimodules.