

**November 1:** Catharina Stroppel (University of Glasgow), “From KL-cells to the rough structure of generalized Verma modules via categorification.” FOLLOWED BY DINNER.

In the first part of the talk I want to recall basics on Kazhdan-Lusztig (briefly KL-) cells and their combinatorics. Then I want to explain how one can categorify KL-cell modules and in which sense this categorification is universal. Inducing cell modules provides a generalization of both, Harish-Chandra bimodules and parabolic category  $\mathcal{O}$ . As an application we describe the structure of generalized Verma modules, that means parabolically induced simple modules. The latter is known to be a hard problem, simply because there is no classification of (arbitrary) simple modules for a finite-dimensional simple complex Lie algebra available.