

November 30: Roman Bezrukavnikov (MIT), “Koszul duality and Kazhdan-Lusztig pattern.”

Appearance of Koszul algebras in description of representation categories has been suggested by Beilinson and Ginzburg, and proved by Soergel. Soergel had also suggested a conjectural extension of his theory to a wider context, where it is supposed to be related to Langlands duality and to description of characters of real reductive groups. The goal of my talk will be to state some new conjectures in a similar spirit (involving quantum groups at a root of 1 and modular Lie algebras). Time permitting, I will explain a modification of Soergel’s conjectures (partly based on ideas of Drinfeld, Mirkovic, Ben-Zvi and Nadler).