September 19, 2012: Vogan's work gives a close relation (duality) between numerics of representations for two Langlands dual real groups. W. Soergel has formulated the underlying conjectural relation between the categories of representations, known as Koszul duality; he has proved his conjecture (partly joint with Beilinson and Ginzburg) in the case of a complex group. In the talk I will describe a joint project with K. Vilonen where we prove an essential special case of the conjecture by essentially following Soergel's method. An alternative approach to the conjecture has been proposed by D. Nadler and D. Ben-Zvi.

Time permitting I will mention two places in F. Kafka's writing describing, respectively, Soergel's and our approach to the subject.