1116-81-1367     **David E. V. Rose*** (`davidero@usc.edu`). *Howe dualities and link invariants.*

Howe duality relates the representation theory of sl(n) and sl(m) in a manner akin to the classical Schur-Weyl duality for representations of sl(n) and the symmetric group. In this talk, we'll discuss results (of the speaker, his collaborators, and others) showing how Howe dualities can be used to study quantum link polynomials and link homology theories. Along the way, we'll discuss applications of this framework to skein modules, their categorified counterparts, and Khovanov-Rozansky homology. (Received September 19, 2015)