

1116-81-1372      **Hoel Queffelec** and **David E. V. Rose\*** ([davidero@usc.edu](mailto:davidero@usc.edu)). *Current algebras, Khovanov-Rozansky homology, and annular link invariants.*

We'll discuss recent work of the speaker (joint with Queffelec) which uses trace decategorification of categorified quantum groups to construct an  $\mathfrak{sl}(n)$  homology theory for links in the thickened annulus. This new invariant is of interest both topologically and representation-theoretically, as it carries an action of  $\mathfrak{sl}(n)$ . Along the way, we'll see a new construction that highlights the role of current algebras in Khovanov-Rozansky homology, producing a spectral sequence from annular  $\mathfrak{sl}(n)$  link homology to  $\mathfrak{sl}(n)$  Khovanov-Rozansky homology. (Received September 19, 2015)