Oded Yacobi* (oyacobi@math.toronto.edu), Department of Mathematics, University of Toronto, Bahen Centre, Toronto, Ontario M5S 2E4, Canada. *Polynomial functors and categorifications*.

The category P of strict polynomial functors was used by Frieldander and Suslin to study the finite generation of affine group schemes, and since their work it has been applied widely in algebraic topology. In this talk we describe actions of affine special linear Lie algebras and the Heisenberg algebra on P categorifying the Fock space representation, and relate these to Schur-Weyl duality. (Received September 21, 2011)