## KHRYSTYNA SERHIYENKO, University of Kentucky

Title: Leclerc's conjecture on a cluster structure for type A Richardson varieties

Leclerc constructed a conjectural cluster structure on Richardson varieties in simply laced types using cluster categories coming from preprojective algebras. We show that in type A, his conjectural cluster structure is in fact a cluster structure. We do this by comparing Leclerc's construction with another cluster structure due to Ingermanson, which uses the combinatorics of wiring diagrams and the Deodhar stratification. Though the two cluster structures are defined very differently, we show that the quivers coincide and clusters are related by the twist map for Richardson varieties, recently defined by Galashin–Lam. This is join work with Melissa Sherman-Bennett.