April 13  **Harry Tamvakis**, Maryland

*Schubert calculus on isotropic Grassmannians and applications*

The cohomology ring of the usual Grassmannian has been studied for well over a century, but the corresponding questions for the Grassmannians of the symplectic group are relatively unexplored. I will discuss my research with Buch and Kresch in this area, including the theory of theta polynomials, which is a combinatorial outgrowth of this work. We obtain new tableau formulas for these objects and related type $C$ Stanley symmetric functions. We introduce the notion of a skew element $w$ of the hyperoctahedral group, and identify the set of reduced words for $w$ with the set of standard $k$-tableau on a certain skew shape.