

Representation Theory, Geometry & Combinatorics Seminar

Organizer: M. Haiman and K. Reshetikhin

Monday, 1:00–3:00pm, 939 Evans

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.