

# Representation Theory, Geometry & Combinatorics Seminar

Organizer: M. Haiman and N. Reshetikhin

Wednesday, 4:00–6:00pm, 939 Evans

---

April 28    **Milen Yakimov**, Louisiana State

*Spectra of quantum Schubert cells*

De Concini, Kac and Procesi defined a family of subalgebras  $U_q^w(g)$  of a quantized universal enveloping algebra  $U_q(g)$ , associated to the elements of the corresponding Weyl group  $W$ . They can be considered as quantizations of the coordinate rings of Schubert cells. Many interesting algebras such as the algebras of quantum matrices are special cases of this construction. We will describe an explicit construction and classification of the torus invariant prime ideals of each  $U_q^w(g)$ . Further applications of these results to classifications of the torus invariant prime ideals of all quantum partial flag varieties will be also discussed.