Algebra and Geometry Seminar

Speaker: Nathan Grieve (RMC, UQAM and Carleton University)

Title: About bundles over Riemann surfaces, the representation space of the trinion and the Verlinde numbers.

Abstract: I will provide context, motivation and background for some past and ongoing investigation with Jacques Hurtubise. The general area of inquiry is the many viewpoints for studying vector bundles (and their moduli) over a given compact Riemann surface. As I will explain, there are several points of departure. They include (among others) work of Mumford, Narasimhan and Seshadri, Goldman, Jeffrey-Weitsman, Agnihotri-Woodward and Belkale.

Time permitting, I will indicate some more recent observations. One such example, includes an elementary solution to the n=3, SU(2)-multiplicative eigenvalue problem.