Algebra
Seminar

Clifford algebras and the search for Ulrich bundles

Danny Krashen
University of Georgia

Abstract: The classical notion of the Clifford algebra of a quadratic form has been generalized to other types of higher degree forms by a number of authors. The representations of these generalized Clifford algebras turn out to correspond to Ulrich bundles, which are a very special class of vector bundle on a hypersurface.

In this talk, Ill describe joint work with Adam Chapman and Max Lieblich of a new construction, generalizing the previous ones, of a Clifford algebra of a finite morphism of proper schemes, Ill discuss connections to the arithmetic of genus 1 curves, and Ill present some new results on the existence of Ulrich bundles.

Monday, April 4, 2016, 4:00 pm
Mathematics and Science Center: W301

Mathematics and Computer Science
Emory University