Algebra Seminar

Motivic equivalence for classical algebraic groups and critical varieties

Anne Quéguiner-Mathieu Paris

Abstract: Two quadratic forms are called motivic equivalent if the corresponding quadrics have isomorphic Chow motives. A theorem due to Vishik provides a purely algebraic characterization of motivic equivalence, in terms of so-called higher Witt indices of quadratic forms. Charles De Clercq proved an analogous result for classical algebraic groups. As a consequence, if two quadratic forms are motivic equivalent, then not only the quadrics, but projective homogeneous varieties of any type under the action of the respective orthogonal groups have isomorphic motives. The talk will explain a generalization of this last observation to all classical algebraic groups, due to a joint work with De Clercq and Zhykhovich.

Tuesday, October 30, 2018, 4:00 pm Mathematics and Science Center: W301

> MATHEMATICS Emory University