Abstract: For central simple algebras of even degree with orthogonal involutions, invariants modeled on the discriminant and Clifford algebra of quadratic forms were defined by Jacobson and Tits, and a relative cohomological invariant of degree 3 is defined by using the Rost invariant of Spin groups when the first two invariants vanish. Its properties and computation will be discussed in the particular case where the algebra has degree 8 and index 4, in relation with properties of 8-dimensional quadratic forms in $I^2$. (Joint work with Anne Quéguiner-Mathieu).

Tuesday, November 25, 2008, 4:00 pm
Mathematics and Science Center: W303