Algebra
Seminar

Involutions, odd degree extensions and generic splitting

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Abstract: Let q be a quadratic form over a field F, and let L be an odd-degree field extension of F. A classical theorem, known as Springer's theorem, asserts that if q is isotropic (resp. hyperbolic) after scalar extension to L, it actually is isotropic (resp. hyperbolic) over the base field. One may ask whether a similar result holds for algebras with involution. In the talk, we will survey known results on this question, and explain the relation with the study of isotropy and hyperbolicity over some relevant function fields. New low degree results will also be included.

Thursday, March 26, 2015, 3:00 pm
Mathematics and Science Center: W303

Mathematics and Computer Science
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