K-Theory, Quadratic Forms and Number Theory Seminar

Dr. Nicolas Grenier-Boley (Universite Paris 13)

will speak on

On hermitian Pfister forms

Wed 6th February 2008 at 4:00PM

Location: Mathematical Sciences Seminar Room

It is known that a quadratic Pfister form over a field K is hyperbolic once it is isotrpic. It is also known that the dimension of an anisotropic quadratic form over K belonging to a given power of the fundamental ideal of the Witt ring of K is lower bounded. In this talk, we will show how to prove weak analogues of these two statements for hermitian forms over a multiquaternion algebra with involution. If we have time, we will talk about an invariant of K for which we can prove an analogue of a result of Elman and Lam concerning the u-invariant of a field of level at most 2. This is joint work with E. Lequeu and M. Mahmoudi.

This talk is part of the **K-Theory, Quadratic Forms and Number Theory** series. For more, see
`https://maths.ucd.ie/seminars`