Algebra and Number Theory Seminar

Professor David Leep (University of Kentucky)

will speak on

The u-invariant of p-adic function fields

Mon 10th May 2010 at 4:15PM

Location: Mathematical Sciences Seminar Room

The u-invariant of a field F is the smallest integer N such that every quadratic form defined over F in more than N variables has a nontrivial zero defined over F. The u-invariant has been calculated for many familiar fields such as algebraically closed fields, finite fields, p-adic fields, number fields, and power series fields over these fields. The u-invariant has also been calculated for function fields over algebraically closed fields and finite fields.

Computing the u-invariant of a function field defined over a p-adic field has only recently been solved. This talk will give the computation of the u-invariant over p-adic function fields. We will discuss the history and background to this result.

[Please note the later starting time of 4.15pm.]

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