



Seminar

K-Theory, Quadratic Forms and Number Theory

Title: The dilogarithm and SL_2

Speaker: Dr. Kevin Hutchinson (UCD)

Date: Wed 6th October 2010 at 3:00PM

Location: Mathematical Sciences Seminar Room

Abstract: The Bloch group of a field, which is constructed from the 5-term functional equation of the dilogarithm, arises in a variety of contexts: invariants of hyperbolic 3-manifolds, algebraic K-theory and the homology of GL_2 , *conformal field theory*.

We will discuss the classical Bloch group and some of the connections mentioned above, and will also discuss a new refinement of the Bloch group which allows us to calculate hitherto unknown parts of the homology of SL_2 .