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## K-Theory, Quadratic Forms and Number Theory Seminar

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**Dr. Amanda Folsom (University of Wisconsin)**

will speak on

**Duality involving the mock theta function  $f(q)$  and analytic properties of Kloosterman-Selberg zeta functions**

Wed 20th February 2008 at 4:00PM

Location: Mathematical Sciences Seminar Room

We show that the coefficients of Ramanujan's mock theta function  $f(q)$  are the first nontrivial coefficients of a canonical sequence of modular forms. This fact follows from a duality which equates coefficients of the holomorphic projections of certain weight  $1/2$  Maass forms with coefficients of certain weight  $3/2$  modular forms. This work depends on the theory of Poincaré series, and a modification of an argument of Goldfeld and Sarnak on Kloosterman-Selberg zeta functions.

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