



**UCD School of
Mathematics and Statistics**

University College Dublin
Belfield, Dublin 4, Ireland

Tel +353 1 716 2580
Fax +353 1 716 1196

**Scoil na
Matamaitice agus na Staitisticí UCD**

An Coláiste Ollscoile, Baile Átha Cliath
Belfield, Baile Átha Cliath 4, Éire

Email seminars@maths.ucd.ie
Web maths.ucd.ie/seminars

K-Theory, Quadratic Forms and Number Theory Seminar

Dr. Sander Zwegers (UCD)

will speak on

More on Nahm's conjecture

Wed 26th January 2011 at 3:00PM

Location: Mathematical Sciences Seminar Room

We consider certain q -series depending on parameters (A,B,C) , where A is a positive definite r times r matrix, B is a r -vector and C is a scalar, and ask when these q -series are modular forms. Werner Nahm (DIAS) has formulated a partial answer to this question: he conjectured a criterion for which A 's can occur, in terms of torsion in the Bloch group. For the case $r=1$, the conjecture has been shown to hold by Don Zagier (MPIM and CdF). For $r=2$, Masha Vlasenko (MPIM) has found a counterexample. In this talk we'll discuss further counterexamples and other aspects of Nahm's conjecture.

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