

# UCD School of Mathematics and Statistics

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#### Scoil na Matamaitice agus na Staitisticí UCD

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

### Dermot McCarthy (UCD)

will speak on

#### p-adic hypergeometric series and supercongruences

Wed 28th October 2009 at 3:00PM

Location: Mathematical Sciences Seminar Room

We discuss recent work in which we generalise Greene's hypergeometric series over finite fields in the p-adic setting. We provide congruences between these p-adic hypergeometric series and truncated ordinary hypergeometric series. We also relate a special value of the p-adic hypergeometric series to the p-th Fourier coefficient of a modular form, thus resolving an outstanding supercongruence conjecture of Rodriguez-Villegas.

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