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**Scoil na
Matamaitice agus na Staitisticí UCD**

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K-Theory, Quadratic Forms and Number Theory Seminar

Dr. Shabnam Akhtari (MPIM)

will speak on

Representation of integers by binary forms

Wed 5th May 2010 at 4:00PM

Location: Mathematical Sciences Seminar Room

Let $F(x,y)$ be an irreducible binary form with integral coefficients and degree n greater than or equal to 3, then by a well-known result of Thue, the equation $F(x,y) = m$ (m an integer) has finitely many solutions in integers x and y . I shall discuss some methods from Diophantine analysis and geometry of numbers to obtain upper bounds upon the number of integral solutions to such equations. I will pay special attention to quartic forms and describe a general method for finding integral points on elliptic curves by reducing them to quartic Thue equations. Then I will show some results on representation of integers by binary forms.

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