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**Scoil na
Matamaitice agus na Staitisticí UCD**

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Algebra and Number Theory Seminar

John Curran (Univ. of Otago, New Zealand)

will speak on

Automorphisms of products of finite groups

Mon 17th November 2008 at 4:00PM

Location: Mathematical Sciences Seminar Room

Let G be a finite group which is a product of subgroups H and K . The talk considers how $\text{Aut } G$, the automorphism group of G , is related to the automorphism groups of H and K and certain central homomorphism groups. In particular, if G is a direct product of H and K , then the size and structure of $\text{Aut } G$ can be nicely specified. If G is a semidirect product and the normal subgroup H is abelian, then $\text{Aut}(G:H)$, the subgroups of automorphisms fixing H , can be specified and is again a semidirect product. Finally subgroups of $\text{Aut } G$ will be considered where $G = HK$ (and one subgroup is normal). Examples will be used throughout to illustrate the results.

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