



## Gravity Seminar

**Title:** Aspects of the theory of particle detectors

**Speaker:** Calvin Smith [UCD]

**Date:** Fri 9th May 2008 at 3:00PM

**Location:** CASL Seminar Room - Belfield Office Park

**Abstract:** NOTE: This seminar will take place in the CASL visitors room.

In this talk I will give a brief overview of the Unruh-DeWitt particle detector model. In particular I will i) motivate, through examples, the basic physics of the theory and ii) speculate how microlocal analysis could provide insight into this pragmatic approach to the particle problem in curved space-time.

Birrell N.D. Davis P.C.W. (1982), Quantum Fields in Curved Space, Cambridge - section 3.3

Wald R.M. (1994), Quantum Field Theory in Curved Spacetime and Black Hole Thermodynamics, Chicago - section 3.3

Junker W. Schrohe E. (2002), Ann. Henri Poincare 3, 1113 (arxiv:math-ph/0109010)

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