

# Mathematics Colloquium

## “Nelder Memorial Lecture”

**Professor Peter McCullagh FRS (University of Chicago)**  
on: **“Some issues connected with likelihood and REML”**

**Thursday, March 8<sup>th</sup> 2012, 5-6pm**

**LT 308 Computing Department, Huxley Building**

**Abstract:**

**Residual likelihood and residual maximum likelihood estimation have been found to be very useful for variance-components estimation in linear models, particularly for models having more than one variance component.**

**The talk is concerned with marginal likelihood in general and with REML for the computation of likelihood-ratio statistics.**

**Can REML be used for testing the significance of a treatment effect?**

**Can REML be combined with the Box-Cox technique for testing the appropriateness of various transformations?**



**Reception afterwards in the Huxley Common Room , Level 5, Huxley Building.**