Working Group on Statistical Learning Seminar

Title: Statistical Chronology Models for Holocene Palaeoenvironmental Reconstruction

Speaker: Thinh Doan

Date: Fri 15th April 2011 at 1:00PM

Location: Statistics Seminar Room- L550 Library building

Abstract: Chronology models aim to reconstruct the sedimentation rate in a single core (typically lake, peat or ocean) given a limited number of age estimates (usually radiocarbon) and fixed depths. Most importantly, they provide a suitably qualified estimate of the uncertainty in the age-depth chronology and thus can be used in a variety of applications.In this talk, I introduce three recently developed Bayesian chronology models (Bpeat, OxCal and Bchron). I make some remarks on how they might be used in palaeoclimate reconstruction. I also present and discuss the results obtained from a large-sample real-data comparison of these models.