

**DGPE**Funded by The Danish Research  
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University of Aarhus • University of Copenhagen

**CREATES**

Center for Research in Econometric Analysis of Time Series

**The Danish Graduate Programme in Economics (DGPE) and Center for Research in Econometric Analysis of Time Series (CREATES) announce:**

**Ph.D. course on “Asymptotic Theory for Integrated Process”**

**April 1-2, 2008**

**Room 119, Building 1326**

**Lectured by: Professor H. Peter Boswijk, University of Amsterdam**

**Local Organizer: Niels Haldrup, Dept. of Economics, University of Aarhus**

### **Programme**

#### **Tuesday, April 1<sup>st</sup>**

- 09.00-10.30 **Lecture 1:** Introduction; basic unit root and cointegration models; weak convergence; Brownian motion and the invariance principle; the continuous mapping theorem.
- 10.30-11.00 Coffee break
- 11.00-12.00 **Lecture 1** (cont.)
- 12.00 Lunch in the canteen
- 13.00-14.30 **Lecture 2:** Dependent sequences; stochastic integrals and Itô's lemma; near-integrated processes; local asymptotic likelihood analysis and local power.
- 14.30-15.00 Coffee break
- 15.00-16.00 **Lecture 2** (cont.)
- 18.00 Course dinner TBA

#### **Wednesday, April 2<sup>nd</sup>**

- 09.00-10.30 **Lecture 3:** Deterministic components and  $L^2$  projections; similarity; GLS detrending; multiple regression with integrated, stationary and deterministic regressors.
- 10.30-11.00 Coffee break
- 11.00-12.00 **Lecture 3** (cont.)
- 12.00 Lunch in the canteen
- 13.00-14.30 **Lecture 4:** Asymptotic likelihood analysis and optimal inference on cointegration; robustness to near-unit roots; non-Gaussian and heteroskedastic likelihood analysis.
- 14.30-15.00 Coffee break
- 15.00-16.00 **Lecture 4** (cont.)