TUTORIALS

3rd International Conference of the ERCIM WG on COMPUTING and STATISTICS (ERCIM'10)

and

4th CSDA International Conference on Computational and Financial Econometrics (CFE'10)

Supported and organized by the London School of Economics, Queen Mary, University of London, and Birkbeck University of London.

10-12 December 2010, Senate House, University of London, UK

The tutorials will take place at the London School of Economics campus on Thursday the 9th of December 2010.

The host is the Department of Statistics, London School of Economics, Houghton Street, London WC2A 2AE.

View the location for the Tutorial Venue by downloading the map of the campus and the area around LSE.

http://www.cfe-csda.org/cfe10/LSECampusMap2010.pdf

http://www.cfe-csda.org/cfe10/LSElocationMap.pdf

For further information please contact Irini Moustaki: i.moustaki@lse.ac.uk

TUTORIAL 1: Latent Variable Models with applications in Social Sciences
STICERD Conference Room, R505, Lionel Robbins Building (Please check the campus map for locating the building)

Irini Moustaki, Department of Statistics, London School of Economics, UK.
The one-day tutorial will cover recent developments in latent variable modelling and item response theory. Latent variable models are widely used in Social Sciences and Medical Statistics for measuring unobserved constructs such as abilities, attitudes, stages of a disease etc. Various models for modelling categorical and continuous observed variables will be covered such as the multidimensional latent trait model, graded response model, model for nominal responses, the partial credit model as well as latent class models. Multi-group analysis and structural relations among latent variables will also be covered. For each model, issues of model specification, estimation and goodness-of-fit will be discussed. Specialized commercial software and R-routines will be used for illustrating the different models using real applications.

TUTORIAL 2: Statistical Signal Extraction and Filtering
Graham Wallace Room, AGWR in the Old Building (Fifth Floor)
(Please check the campus map for locating the Old Building)

D.S.G. Pollock, Department of Economics, University of Leicester, UK.

These tutorial lectures will review the theory and the practice of some of the modern methods of statistical signal extraction, and they will encompass some of the most recent developments. The lectures will begin with a review of the well-established Wiener--Kolmogorov theory of linear filtering, together with its interpretations within the time domain and the frequency domain. The theory will be extended to encompass short nonstationary sequences. Various alternative algorithms for realising the filters will be presented. The lectures will proceed to describe filtering methods that exploit the concepts of the Fourier analysis. Such methods presuppose that the de-trended data can be expressed as a combination of trigonometrical or complex exponential functions. The techniques that enable these methods to be applied to trended and nonstationary data will be described. A variety of recently developed filtering methods that continue to evade a full theoretical analysis will also be described. These will include the methods of singular spectral analysis and of empirical mode decompositions.

Schedule
09:30 - 10:45 Lecture
10:45 - 11:15 Coffee Break
11:15 - 12:45 Lecture
12:45 - 14:00 Lunch (not provided)
14:00 - 16:00 Lecture
16:00 - 16:45 Coffee Break (in AGWR for all people - get together)

Lunch possibilities at the LSE

Brunch Bowl: Old Building 4th Floor

The Garrick on Houghton Street

Café 54: Ground floor of the New Academic Building.

Lunch possibilities outside the LSE

There are various sandwich places around the school
On Kingsway: Pret a manger, Eat, Wasabi, Starbucks and various other places

LSE is also 10 minutes walk from Covent Garden, a lively place with an open market, shops and choice of restaurants. (Please check the area map)


© Crown copyright
Euston
Euston Road
Euston Sq
Passfield Hall
University College
Hughes Parry, Canterbury, Commonwealth Halls
Rosebery Ave
Rosebery Avenue Hall
Warren St
UCH
ULU
Connaught Hall
International Hall
Russell Sq
Gray's Inn Rd
Carr-Saunders Hall
Tottenham Court Road
College Hall
Birkbeck College
SOAS
Senate House
Farringdon
Barbican
Goodge St
Gower Street
British Museum
Theobald's Road
Chancery Lane
High Holborn
Holborn
Tottenham Court Rd
High Holborn Residence
Kingsway
LSE
Chancery Lane
Oxford Street
Oxford Circus
Grosvenor House Residence
Fleet Street
St Paul's Cathedral
Royal Courts of Justice
City Thameslink
Charing Cross Road
Covent Garden
Royal Opera House
Aldwych
Regent Street
Shaftesbury Ave
Leicester Sq
Temple
Victoria Embankment
Blackfriars
Piccadilly Circus
King's College
Somerset House
Blackfriars Bridge
Millennium Bridge
Strand
National Gallery
Waterloo Bridge
Piccadilly
Charing Cross
Trafalgar Sq
Tate Modern
Bankside Residence
Embankment
National Theatre
Green Park
Pall Mall
British Council
Northumberland House
Royal Festival Hall
Southwark Street
Whitehall
The Mall
Waterloo East
York Rd
Waterloo
London Eye
Westminster
Westminster Bridge
0 metres 500
Houses of Parliament


Queens House
QH
New Academic Building
NAB
SARDINIA STREET
LINCOLN'S INN FIELDS
M
PORTSMOUTH STREET
Entrance to
LSE Research Lab
(floors 4 and 5)
PORTUGAL STREET
CAREY STREET
NCT
New Court
Ramp
MAIN LIBRARY
R
Lionel Robbins Building
Z
PS
L
Q
K
Y
X
I
SHEFFIELD STREET
T
J
JOHN WATKINS PLAZA
Ramp
PH
S
St Clement's
GRANGE COURT
Peacock Theatre
CLARE MARKET
PORTUGAL STREET
Lift and Steps
KINGSWAY
G
A
Old Building
C
Clare Market
N
Tower One
U
CLEMENT'S INN
E
East Building
Tower Two
V
Tower Three
W
H
Connaught House
HOUGHTON STREET
B
Columbia House
AH
Clement House
D
ALDWYCH
entrance hidden from view
entrance
disabled access
bridge