

<http://www.liv.ac.uk/~cmchenke/imagew/>

Multidisciplinary Workshop Programme for 28

November 2007

Image Processing Techniques and Applications

Venue: Maths Sciences Building (Precinct Map No 39)

09:00 09:25 Registration + Tea/Coffee

09:25 09:30 Prof Andy Cossins: "Introduction / Welcome"

SESSION 1 --- Chair: Prof Andy Cossins, Director of Biocomplexity Institute / Director of LINSET

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|----|-------|-------|---|
| T1 | 09:30 | 10:10 | Prof Arvid Lundervold:
"Mathematics in biomedical imaging – examples from cell imaging,
brain imaging and kidney imaging" |
| T2 | 10:10 | 10:30 | Prof Asoke Nandi:
"Machine learning and image processing for breast cancer diagnosis" |
| T3 | 10:30 | 10:50 | Prof Peter Giblin:
"Singularity theory and geometry in computer vision" |
| T4 | 10:50 | 11:10 | Prof Ke Chen /Mr C Brito /N Chumchob /N Badshah:
"Variational models for automatic image segmentation
and registration" |
| | 11:10 | 11:40 | Refreshments |

SESSION 2 --- Chair: Prof Peter Giblin, Dept of Mathematical Sciences

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| T5 | 11:40 | 12:20 | Prof Alan Nahum:
"Radiobiologically optimised radiotherapy" |
| T6 | 12:20 | 12:40 | Prof Neil Roberts /Dr Laura Parkes:
"Non-invasive Measurement of Brain Structure, Function,
Integrity, Connectivity and Metabolism" |
| T7 | 12:40 | 13:00 | Dr Colin Baker:
"State of the art radiotherapy and the need for advanced imaging
capabilities" |
| | 13:00 | 13:50 | Lunch [Free/online registration before 23 Nov required] |

SESSION 3 --- Chair: Prof Ke Chen, Dept of Mathematical Sciences

T8	13:50	14:30	Prof Chris Moore: "Image Processing in Measurement Guided radiation Therapy"
T9	14:30	14:50	Dr Hane M Aung /Dr Y Goulermas: "An image analysis and measurement system for video-fluoroscopic (vf) evaluation of swallowing dysfunctions"
T10	14:50	15:10	Dr Ren Cooper / Dr A Boston / Dr H Boston / Prof Paul Nolan: "Gamma-Ray imaging with segmented HPGe detectors"
	15:10	15:40	Refreshments

SESSION 4 --- Chair: [Dr Colin Baker, Division of Medical Imaging and Radiotherapy, School of Health Sciences](#)

T11	15:40	16:20	Dr John Kleijne: "Fluorescence in Vivo imaging of disease biology"
T12	16:20	16:40	Dr Steve Barrett / Prof Peter Weightman : "Spin-offs from image analysis for scanning microscopy"
T13	16:40	17:00	Dr Bernard Diaz / Dr Derek Gould: "CRUEL imaging - problems and techniques from the UK CRAIVE project for Interventional Radiology"
T14	17:00	17:20	Dr David Spiller / Dr P Gould / Prof M White: "Higher throughput multi-parameter time lapse imaging and analysis of living cells"