

2nd Joint Liverpool-Glasgow Maths Healthcare Centre Meeting

Thursday 30th August 2018

SIRE Seminar Room Chadwick Building

Stephenson Institute of Renewable Energy

12.00-12.50	Arrival and Lunch	
12.50-1.10	Opening Address <i>Rachel Bearon (Liverpool Centre)</i> <i>Xiaoyu Luo (Glasgow Centre) Executive Director</i> <i>Ke Chen (Liverpool Centre Director)</i>	
Session 1 <i>Chairperson: Rachel Bearon</i>		
1.10-1.30	Modelling Dynamic Response of Stented Blood Vessels	Alexander Movchan (Liverpool Centre)
1.30-1.50	Effect of Geometry Representation on Parameter Inference in Mathematical Models on Left Ventricle	Alan Lazarus (Glasgow Centre)
1.50-2.10	Issues on Image-based Ventricular Geometry Reconstruction	Hao Gao (Glasgow Centre)
2.10-2.30	Accelerating the Convergence of Optimisation Procedures for Parameter Estimation in Soft Tissue Mechanical Models via Bayesian Optimisation	Agnieszka Borowska (Glasgow Centre)
2.30-2.50	Incorporating Data into Disease Dynamics	Anne Jones (Liverpool Centre)
2.50-3.10	Systems Toxicology Approach to Identifying Paracetamol overdose	Chantelle Mason (LJMU)
3.10-3.40	Poster Session with Refreshments	
Session 2 <i>Chairperson: Nick Hill</i>		
3.40-4.00	Multivariate Longitudinal Modelling for Clinical Prediction	Marta Garcia Finana (Liverpool Centre)
4.00-4.20	Modelling Insulin effects on Cell Cycle and Bio Energetics	Mirela Domijan (Liverpool Centre)
4.20-4.40	Modelling Dynamics of Microbial Communities Growing in Mixed Environment	Nouf Alghamdi (Liverpool Centre)
4.40-5.20	Facilitated discussion on future directions	Rachel Bearon (Liverpool Centre)
5.20-5.30	Closing comments	Ke Chen (Liverpool Centre)
6.30	Dinner	

Posters

- Multiphase MCMC Sampling for Parameter Inference in Non-linear Ordinary Differential equations **Alan Lazarus (Glasgow Centre)**
- A Mathematical Model for Blood Flow in the Coronary Circulation **Jay Mackenzie (Glasgow Centre)**
- Cell motility & biofilm formation **Marianne Scott (Liverpool Centre)**
- The Generalised Structure Tensor approach and its application to constitutive modelling of passive myocardium **Andrey Melnik (Glasgow Centre)**
- Improved Variational Models for Multi-Modality Image Registration **Anis Theljani (Liverpool Centre)**
- Complex Motility: Applications to Glioblastoma Motility and Bacterial Chemotaxis **Marianne Scott (Liverpool Centre)**
- Coupled agent-based and Hyperelastic Modelling of Left Ventricle post Myocardial Infarction **Xiaoyu Luo (Glasgow Centre)**