

GLASGOW SOFTMECH – LIVERPOOL CMH

Joint Meeting of two EPSRC Centres for Mathematical Sciences in Healthcare

Glasgow, 2018-04-04



— Directions —

Venue Room 116, School of Mathematics and Statistics, University of Glasgow, Glasgow G12 8SQ
Date 2018-04-04
Contact Radostin Simitev (Radostin.Simitev@glasgow.ac.uk)

— Programme —

■ Arrival and Lunch

12:00 – 12:50 Arrival and sandwich lunch
12:50 – 13:00 Welcome and overview of the SoftMech and LCMH Centres.

■ Session 1

Chairperson: Radostin Simitev

13:00 – 13:15 GABRIELA CZANNER *University of Liverpool*
Spatial statistical models for medical imaging data
13:15 – 13:30 MANLIO TASSIERI *School of Engineering, University of Glasgow*
Dynamics of Semiflexible Polymer Solutions in the Tightly Entangled Concentration Regime:
The fall of a theoretical framework!
13:30 – 13:45 BAKHTI VASIEV *Dept Mathematical Sciences, University of Liverpool*
Universal statistics of epithelial tissue topology
13:45 – 14:00 XIAOYU LUO *School of Mathematics and Statistics, University of Glasgow*
Soft tissue mechanics and FSI in the cardiovascular system
14:00 – 14:15 JINJU CHEN (VICKY) *School of Engineering, Newcastle University*
Multiscale modelling and mechanical characterisation of biofilms

■ Poster Session

14:15 – 14:45 Posters and coffee

■ Session 2

Chairperson: Nick Hill

14:45 – 15:00 SEAN MCGINTY *School of Engineering, University of Glasgow*
Mathematical modelling in drug delivery and discovery
15:00 – 15:15 ANIS THELJANI *Dept Mathematical Sciences, University of Liverpool*
Improved variational models for accurate mono- and multi-modality image registration
15:15 – 15:30 PETER STEWART *School of Mathematics and Statistics, University of Glasgow*
Optic nerve sheath bleeding driven by rapid cerebrospinal fluid pressure amplification
15:30 – 15:45 YALIN ZHENG *Institute of Ageing and Chronic Disease, University of Liverpool*
Development of AI to Aid Medical Imaging
15:45 – 16:00 HAO GAO *School of Mathematics and Statistics, University of Glasgow*
Mathematical modelling in myocardial infarction: issues and challenges

■ Round Table discussion

Chairperson: Xiaoyu Luo

16:00 – 16:15 Coffee break
16:15 – 16:45 Round table discussion
16:45 – 17:00 Summary

■ Dinner

19:00 – Dinner at the Bothy (11 Ruthven Lane, Hillhead, Glasgow, G12 9BG)

— Questions for Discussion —

1. Propose a format for an eventual next joint meeting.
2. Propose a joint SoftMech-LCMH collaborative project you will be interested in. Expand - Why is the project significant? Methodology? Main collaborators? Resources needed?
3. Propose activities for outreach to third parties.
4. How to engage with industrial and clinical partners?
5. Identify common mathematical, statistical or computational challenges.

— Acknowledgements —

The logo for EPSRC (Engineering and Physical Sciences Research Council) features the acronym 'EPSRC' in a bold, sans-serif font. Above the letters 'P' and 'S' are horizontal lines that extend to the left and right respectively, creating a stylized graphic element.

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