

**Seminar name: Mathematic Modelling Seminars****Year: 2018/19****Semester 1**

<b>Date</b>	<b>Time/place</b>	<b>Speaker</b>	<b>Title</b>
4 <sup>th</sup> October 2018	12:00-13:00	Andy Archer, Loughborough University	Modelling of Phase Transformations: Phase-field models
9 <sup>th</sup> October 2018	12:00-13:00/N.1.12 Haslegrave Building	Jalal Sarabadani, Loughborough University	Polymer translocation through a pore
18 <sup>th</sup> October 2018 #2	13:00-14:00/N.1.12 Haslegrave Building	Fabian Schwarzendahl (MPI Goettingen)	Modelling microswimmers
18 <sup>th</sup> October 2018	12:00-13:00/N.1.12 Haslegrave Building	Vili Heinenon (MIT)	Higher-order quantum hydrodynamics for supersolids
25 <sup>th</sup> October 2018	12:00-13:00/N.1.12 Haslegrave Building	Antonis Parasyris, Loughborough University	Modelling filtration processes through porous media
1 <sup>st</sup> November 2018	12:00-13:00/N.1.12 Haslegrave Building	Kristian Thijssen (Oxford)	Active Nematics
8 <sup>th</sup> November 2018	12:00-13:00/N.1.12 Haslegrave Building	Mounirah Areshi, Loughborough University	Maths Modelling Seminar: Kinetic Monte Carlo and Hydrodynamic modelling of liquid droplets on surfaces
15 <sup>th</sup> November 2018	12:00-13:00/ N.1.12 Haslegrave Building	Tyler Shendruk, Loughborough University	Maths Modelling Seminar: The Simplest Simulations of Squishy Physics
22 <sup>nd</sup> November 2018	12:00-13:00/ N.1.12 Haslegrave Building	Roger Smith, Loughborough University	Maths Modelling Seminar: A brief history of atomic collisions in solids
29 <sup>th</sup> November 2018	12:00-13:00/ N.1.12 Haslegrave Building	Kenny Jolley, Loughborough University	Atomistic Modelling of Defects in Graphite

## Semester 2

<b>Date</b>	<b>Time/place</b>	<b>Speaker</b>	<b>Title</b>
16 <sup>th</sup> January 2019	14:00-15:00/SCH.0.01 Schofield Building	Professor Tapio Ala-Nissila, Mathematical Sciences, Loughborough University	Multiscale Modeling of 2D Materials with the Phase-Field Crystal Model*
8 <sup>th</sup> February 2019	14:00-15:00/SCH.0.13 Schofield Building	Dr Andrew Archer, Mathematical Sciences, Loughborough University	Surface freezing, surface melting and crystal nucleation: results for a two-dimensional soft-core fluid
15 <sup>th</sup> February 2019	14:00-15:00/N.3.17 Haslegrave Building	Dr Achilleas Lazarides, Mathematical Sciences, Loughborough University	Macroscopics from microscopics in many-body quantum systems
22 <sup>nd</sup> February 2019	14:00-15:00/SCH.1.05 Schofield Building	Ze Pinto Vieira (Loughborough University)	Constraining the physics of the early Universe
1 <sup>st</sup> March 2019	14:00-15:00/SCH.0.13 Schofield Building	Ze Pinto Vieira (Loughborough University)	Dislocation motion and dynamics in bilayer graphene extended to radiation damage of nuclear graphite
8 <sup>th</sup> March 2019	14:00-15:00/CC.1.09 James France Building	Alberto Scacchi (Loughborough University)	Flow induced crystallization of penetrable particles
15 <sup>th</sup> March 2019	14:00-15:00/SCH.0.13 Schofield Building	Gyula Toth (Loughborough University)	Analytical description of amorphous solid structures (Random solutions of deterministic PDEs)
22 <sup>nd</sup> March 2019	14:00-15:00/SCH.0.13 Schofield Building	Achilleas Lazarides (Loughborough University)	Macroscopics from microscopics in many-body driven quantum systems
29 <sup>th</sup> March 2019	14:00-15:00/SCH.0.13 Schofield Building	Adam Lloyd (Loughborough University)	Modelling the effects of hydrogen on zirconium
3 <sup>rd</sup> May 2019	14:00-15:00/N.1.12 Haslegrave Building	Zé Pinto-Viera (Loughborough University)	Wiggly Cosmic String Evolution
10 <sup>th</sup> May 2019	14:00-15:00/N.1.12 Haslegrave Building	Gyula Toth (Loughborough University)	Analytical description of amorphous solid structures (Random solutions of deterministic PDEs)

24 <sup>th</sup> May 2019	14:00-15:00/N.1.12 Haslegrave Building	Jamie Christie (Loughborough University)	Modelling the thermal conductivity of materials
31 <sup>st</sup> May 2019	14:00-15:00/N.1.12 Haslegrave Building	Juliet Ojiako (Loughborough University)	Deformation of liquid surfaces under impinging gas jets: modelling and experiments
7 <sup>th</sup> June 2019	14:00-15:00/N.1.12 Haslegrave Building	Michael Watts (Loughborough)	Passivation of Planar Defects in CdTe Photovoltaics: An Atomistic Modelling Viewpoint
14 <sup>th</sup> June 2019	14:00-15:00/N.1.12 Haslegrave Building	Lily Hunnisett (Loughborough)	The Computational Design of Fluorescent Fingerprinting Chemicals for Crime Scene Investigations
17 <sup>th</sup> June 2019	15:00-16:00/SCH.0.13 Schofield Building	Daniel Stopper (Tubingen)	Fluids with competing interactions in and out of equilibrium
21 <sup>st</sup> June 2019	15:00-16:00/SCH.0.13 Schofield Building	Stephen Yeandel (Loughborough)	Li-ion Dynamics in Al <sup>3+</sup> Doped Li <sub>2</sub> SiP <sub>2</sub>