

## Nineteenth Cambridge/Oxford Applied Mathematics Meeting Friday 14 June 2019 in L3, AWB

| 10.30–10.55 | Tea and coffee   | Mezzanine   |
|-------------|--|---|
| 10.55–11.00 | Introduction and timekeeping   |   |
| 11.00-11.20 | Matthew Butler   | Sticking with droplets: Insect-inspired modelling of capillary adhesion                           |
| 11.20-11.40 | Maria Tătulea-Codrean  | Pantene Pro-karyote: How bacteria keep their flagella tangle-free                                 |
| 11.40-12.00 | Abinand Gopal  | Solving the Laplace equation in domains with corners using rational functions                     |
| 12.00-12.20 | Matthew Colbrook   | Resolving the resolvent: How to 'diagonalise' infinite matrices                                   |
| 12.20-12.40 | Andreas Sojmark  | On the freezing of supercooled financial markets  |
| 12.40-13.00 | Chris Howland  | Pathways to mixing in a turbulent ocean   |
| 13.00–13.58 | Lunch  | Common room   |
| 13.58–14.00 | Welcome back   |   |
| 14.00-14.20 | Agnese Barbensi  | Knotty molecules!   |
| 14.20-14.40 | Samuel Alperin   | Quantum hydrodynamical solitons catch their breath  |
| 14.40-15.00 | Joshua Bull  | Agent-based modelling of tumour spheroid dynamics   |
| 15.00–15.20 | Laura Cope   | Pattern formation in simple jet stream models   |
| 15.20–15.48 | Tea and coffee   | Mezzanine   |
| 15.48–15.50 | Welcome back   |   |
| 15.50–16.10 | Caoimhe Rooney   | Granular matters: Using homogenisation to model the electrothermal behaviour of granular material |
| 16.10–16.30 | Karol Bacik  | Wake up! Why dunes do not fall asleep at the wheel  |
| 16.30-16.50 | Hamza Alawiye  | Post-buckling analysis of elastic bilayers  |
| 16.50–17.10 | Rajesh Kumar Bhagat  | On the origin of a hydraulic jump   |
| 17.15–17.20 | Judging and grand presentation of the Woolly Owl<br>Judges: Dr Rosemary Dyson & Dr Pablo Luis Rendón Garrido |   |
| 17.20–Coach | Refreshment in the Royal Oak (30 seconds walk)   |   |