School of Mathematics and Statistics
Research Day 24th January 2019
Talks in Theatre D; posters, food and drink in 1A

*9.00-9:30: tea & coffee + poster setup*

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| 09:30 | Ineke | De Moortel | Propagating coronal disturbances in sunspot and plage loops |
| 09:45 | Tommaso | Lorenzi | Clonal selection in acute leukemias: insight from integrodifferential equations |
| 10:00 | Martyn | Quick | Permutation-based presentations for Brin's higher-dimensional Thompson groups nV |
| 10:15 | Linnea | Franssen | A mathematical framework for modelling the metastatic spread of cancer |
| 10:30 | Andy | Wright | How resonant MHD wave coupling works in 3D |
| 10:45 | Jonathan | Hickman | Factorising X^n |

*11.00-11.30: coffee + posters*

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| 11:30 | Jack | Reid | Coronal MHD avalanches: distribution of heating and turbulence? |
| 11:45 | Lawrence | Lee | Self-affine multifractals in the plane |
| 12:00 | Helen | Burgess | Long frontal waves and dynamic scaling in freely evolving equivalent barotropic flow |
| 12:15 | Giorgos | Minas | Stochastic modelling of reaction networks in molecular biology |
| 12:30 | Sophie | Huczynska | Combinatorics in Information Security |
| 12:45 | Carl | Donovan | Trading in P2P markets |

*13.00 - 14.00: lunch + posters*

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| 14:00 | Collin | Bleak | Quotient structures arising from the group of automorphisms of the full two-sided shift. |
| 14:15 | Thomas | Neukirch | Distribution functions for collisionless current sheet |
| 14:30 | Fiona | MacFarlane | Bridging the gap between individual-based and continuum models of growing cell populations |
| 14:45 | Charles | Paxton | Quantifying the monstrous: adventures in statistical cryptozoology |
| 15:00 | Louis | Theran | Hearing the shape of a room |
| 15:15 | Martin | MacBeath | An Introduction to Neolithic Mathematics |
| 15:30 | Peter | Cameron | The Hall-Paige Conjecture |
| 15:45 | Rosemary | Bailey | Treasure hunt: mistakes and wrong turnings in the search for good designs |

*16.00 - 17.00: Drinks and nibbles*

**Posters:**

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| Stuart | Burrell | Dimensions of inhomogeneous self-affine sets |
| David | Dritschel | Dirac meets Einstein: quantum gravitational dynamics |
| Luke | Elliot | Rubin's Theorem |
| Craig | Johnston | A New Approach for Modelling Chromospheric Evaporation in Response to Enhanced Coronal Heating |
| Alex | Konovalov | How learn GAP - an open source software system for discrete computational mathematics |
| Giorgos | Minas | Simulation, analysis and inference of large, and noisy biological oscillators using pcLNA |
| Thomas | Neukirch | New Analytical 3D Magnetohydrostatic Equilibria for Modelling Solar Magnetic Fields |
| Paolo | Pagano | In Situ Generation of Transverse Magnetohydrodynamic Waves from Colliding Flows in the Solar Corona |
| Lindsay | Scott-Hayward | Analysis of elephant carcass locations in Etosha National Park using the new, and improved, CReSS with SALSA model select |
| Chuong | Tran | Velocity-pressure correlation in Navier--Stokes flows and the problem of global regularity |
| Chiara | Villa | Exploiting evolutionary dynamics: the role of vascular topology in the emergence of intratumour phenotypic heterogeneity |
| Hannah | Worthington | Estimating population size with state-dependent capture probabilities |