



$$\begin{aligned} \frac{\partial R^i}{\partial t} &= D^i \nabla^2 R^i + k_{off}^i(z) C^i - k_{on}^i(z) \\ \frac{\partial L^i}{\partial t} &= D_L^i \nabla^2 L^i + k_{off}^i(z) C^i - k_{on}^i(z) \\ \frac{\partial C^i}{\partial t} &= D_c^i \nabla^2 C^i - k_{off}^i(z) C^i + k_{on}^i(z) \end{aligned}$$

Spatio-temporal Dynamics: Challenges in Biological Fluorescence Data

13 - 16 July 2010

Warwick Mathematics Institute

<http://go.warwick.ac.uk/FLUO2010>

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Single cell monitoring techniques using fluorescent probes have revealed a significant spatial-temporal complexity underpinning even some of the simplest of cellular functions. Image acquisition and analysis pose a number of challenging problems at the interface of biology, physics and mathematics, whilst the emergence of high quality dynamic spatial data is allowing complex model systems to be fitted and verified for the first time. This multidisciplinary workshop will bring together leading experts in modelling and data analysis, and experimentalists on key biological systems. Topics include super resolution and specialist microscopy techniques, state of the art image analysis and in vivo imaging. This workshop is part of an EPSRC Symposium on the Mathematics of Complexity Science and Systems Biology.

Organisers: Nigel Burroughs, Till Bretschneider, Kurt Anderson

Speakers include

Dan Axelrod, University of Michigan
Paul Barber, University of Oxford
Gaudenz Danuser, Harvard Medical School
Xavier Darzacq, IBENS, Paris
Zvi Kam, Weizmann Institute of Science
Robert Murphy, Carnegie Mellon University
George Patterson, NIH Bethesda
Ernst Stelzer, EMBL Heidelberg
Michael Unser, EPFL
Vasilis Ntziachristos, TU Munich

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