### Wednesday 19th September 2007

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>18:00–20:00</td>
<td>Joint reception with QEST in the Fellows Library of the Royal College of Surgeons, Nicolson St, Edinburgh, EH8 9DW.</td>
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### Thursday 20th September 2007

<table>
<thead>
<tr>
<th>Time</th>
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<tr>
<td>8:30–9:00</td>
<td>Registration at the e-Science Institute, 13–15 South College Street, Edinburgh EH8 9AA</td>
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| 9:00–10:00 | **Invited speaker: Daniel T. Gillespie.**  
Stochastic Chemical Kinetics. |
| 10:00–10:45 | Coffee                                                               |
| 10:45–11:15 | Raya Khanin and Des Higham.  
Chemical Master Equation and Langevin Regimes for a Gene Transcription Model |
| 11:15–11:45 | Werner Sandmann.  
Simultaneous Stochastic Simulation of Multiple Perturbations in Biological Network Models |
| 11:45–12:15 | Federica Ciocchetta, Jane Hillston, Martin Kos and David Tollervey.  
Modelling Yeast pre-rRNA Processing |
| 12:15–13:30 | Lunch                                                               |
| 13:30–14:00 | François Fages and Aurélien Rizk.  
On the Analysis of Numerical Data Time Series in Temporal Logic |
| 14:00–14:30 | Heike Siebert and Alexander Bockmayr.  
Context Sensitivity in Logical Modelling with Time Delays |
| 14:30–15:15 | Tea                                                                 |
Stochastic Simulation of Biological Systems with Dynamical Compartment Structure |
Computational Simulation of Optical Tracking of Cell Populations using Quantum Dot Fluorophores |
| 16:15–16:45 | Lorenzo Dematteé, Corrado Priami, Alessandro Romanel and Orkun Soyer.  
A Formal and Integrated Framework to Simulate Evolution of Biological Pathways |
| 19:30 | Conference Dinner in the Royal Society of Edinburgh, 22–26 George Street, Edinburgh, EH2 2PQ. |
Friday 21st September 2007

9:00–10:00  **Invited speaker:** Mark Girolami.  
*The Convergence of Mechanistic and Statistical Modelling within Systems Biology.*

10:00–10:45  Coffee

10:45–11:15  Bartek Wilczynski and Jerzy Tiuryn.  
*Reconstruction of Mammalian Cell Cycle Regulatory Network from Microarray Data using Stochastic Logical Networks*

11:15–11:45  Maria Luisa Guerriero, John Heath and Corrado Priami.  
*An Automated Translation from a Narrative Language for Biological Modelling into Process Algebra*

11:45–12:15  Andrea Bracciali, Marcello Brunelli, Enrico Cataldo and Pierpaolo Degano.  
*Expressive Models for Synaptic Plasticity*

12:15–13:30  Lunch

13:30–14:00  Alberto Credi, Marco Garavelli, Cosimo Laneve, Sylvain Pradalier, Serena Silvi and Gianluigi Zavattaro.  
*Modelization and Simulation of Nano Devices in nanok Calculus*

14:00–14:30  Andrew Phillips and Luca Cardelli.  
*Efficient, Correct Simulation of Biological Processes in the Stochastic pi-calculus*

14:30–15:15  Tea

*A Unifying Framework for Modelling and Analysing Biochemical Pathways Using Petri Nets*

15:45–16:15  Liliana Félix, Francesc Rosselló and Gabriel Valiente.  
*Reconstructing Metabolic Pathways by Bidirectional Chemical Search*

16:15–16:45  Aurélien Naldi, Denis Thieffry and Claudine Chaouiya.  
*Decision Diagrams for the Representation and Analysis of Logical Models of Genetic Networks*

16:45  Close