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BioPPN 2011
International Workshop on
Biological Processes & Petri Nets

Workshop co-located with PETRI NETS 2011
Newcastle upon Tyne, United Kingdom, June 20, 2010
Proceedings

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Preface

These proceedings contain the nine peer-reviewed contributions accepted for the Second International Workshop on Biological Processes & Petri Nets (BioPPN 2011), held as a satellite event of PETRI NETS 2011, in Newcastle, UK, on June 20, 2011. This workshop has been organised as a communication platform for researchers interested in the application of Petri nets in the broad field of *integrative biology*.

Integrative biology aims at deciphering essential biological processes that are driven by complex mechanisms, involving miscellaneous interacting molecular compounds. In this context, the need for appropriate mathematical and computational modelling tools is widely advocated. Petri nets have proved their usefulness for the modelling, analysis, and simulation of a diversity of biological networks, covering qualitative, stochastic, continuous and hybrid models. The deployment of Petri nets to study biological applications has not only generated original models, but has also motivated fundamental research.

We received two types of contributions: research papers and work-in-progress papers. All papers have been reviewed by four to six reviewers coming from or being recommended by the workshop's Program Committee. The list of reviewers comprises 30 professionals of the field. The nine accepted papers (with an acceptance rate of 82%) involve 41 authors coming from 9 different countries. In summary, the workshop proceedings enclose theoretical contributions as well as biological applications, demonstrating the interdisciplinary nature of the topic.

The workshop was complemented by an invited talk *Systems Biology in Supercomputing Environment* given by Satoru Miyano from Human Genome Center, Institute of Medical Science at the University of Tokyo in Japan.

As the hosting conference was originally planned to take place in Japan, it was an explicit goal of our workshop to promote the communication between Europe and Asia. We are especially glad that three papers from Japanese authors made it into the workshop. We would like to express our sympathy with the Japanese people and do hope that the precautions by the Steering committee will turn out to be overprotecting ones.

For more details see the workshop's website
<http://www-dssz.informatik.tu-cottbus.de/BME/BioPPN2011>.

June 2011

Monika Heiner and Hiroshi Matsuno

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