# Second International Conference on Algebraic Biology AB'07



### July 2-4, 2007, RISC, Castle of Hagenberg, Austria



http://www.risc.uni-linz.ac.at/conferences/ab2007/

#### **Invited Speakers**

Reinhard Laubenbacher, USA Bud Mishra, USA Gheorghe Paun, Romania

#### **Conference Chairman**

Hirokazu Anai, Japan Bruno Buchberger, Austria Hoon Hong, USA Katsuhisa Horimoto, Japan

## Program Chairs and Proceedings Editors

Hirokazu Anai, Japan Katsuhisa Horimoto, Japan Temur Kutsia, Austria

#### **Program Committee**

Tatsuya Akutsu, Japan Hirokazu Anai, Japan Armin Biere, Austria Bruno Buchberger, Austria Vincenzo Capasso, Italy Luca Cardelli, UK Gautam Dasgupta, USA Francois Fages, France Shinji Hara, Japan Sepp Hochreiter, Austria Hoon Hong, USA Katsuhisa Horimoto, Japan Hans Irschik, Austria Erich Kaltofen, USA Veikko Keränen, Finland Temur Kutsia, Austria James F. Lynch, USA Manfred Minimair, USA Enno Ohlebusch, Germany Stanly Steinberg, USA Bernd Sturmfels, USA Carolyn L. Talcott, USA Ashish Tiwari, USA Jens Volkert, Austria Dongming Wang, China/France Kazuhiro Yokoyama, Japan Ruriko Yoshida, USA

#### **Aims and Scope**

The Second International Conference on Algebraic Biology, AB'07, is an international forum to promote discussion and interaction between researchers who intend to apply symbolic computation—computer algebra and computational logic—to various issues in biology.

Applications of algebraic and logic methods in biology, addressing:

- molecular sequence analysis
- molecular structure analysis
- molecular evolution
- genomics
- proteomics
- gene regulation
- gene expression

- gene ontology
- network Inference
- mathematical modeling
- model identification
- system analysis and design
- system verification
- synthetic biological systems

and other problems in biology with symbolic methods including, but not restricted to:

- polynomial methods
- group theoretical methods
- rewriting methods
- automated reasoning methods
- automata methods
- formal language methods
- combinatoric methods
- symbolic-numeric algorithms (sequential, parallel, distributed, grid processing)

#### **Submission**

Authors are invited to submit original papers that have not been submitted for publication elsewhere. Submissions should be at most 15 pages including references, prepared in LaTeX and formatted according to the Springer llncs style. Submitted papers will be peer-reviewed, and the accepted papers will appear in the proceedings before the conference. Proceeding will be published by Springer Verlag.

#### **Dates**

December 4, 2006: Deadline for registration of abstracts.

December 11, 2006: Deadline for submission of full papers.

March 5, 2007: Notification of acceptance/rejection.

April 2, 2007: Camera-ready paper submission.

July 2-4, 2007: Conference.

#### **Conference Venue**

Research Institute for Symbolic Computation, Johannes Kepler University Linz. Castle of Hagenberg, Austria.



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