

“The ABC of Life Science Informatics”:  
Mini-Symposium of Bioinformatics and Cheminformatics Research Groups  
from the Aachen-Bonn-Cologne Region

**November 6, 2009**  
**Bonn-Aachen International Center for Information Technology (B-IT)**  
**Lecture Hall**

09:00 **Welcoming / coffee**

09:30 *Prof. Dr. Martin Hofmann-Apitius*  
Bonn-Aachen International Center for Information Technology (B-IT)  
& Fraunhofer Institute for Algorithms and Scientific Computing SCAI  
**“Introductory Remarks”**

09:40 *Prof. Dr. Wolfgang Alt*  
Theoretical Biology at the Mathematical and Natural Science Faculty Bonn (IZMB)  
**“Simulation Models for Biological Systems Regulation - Some Examples and Principles”**

10:00 *Prof. Dr. Thomas Berlage*  
RWTH Aachen & Fraunhofer FIT  
**“Model-Based Engineering of Life Science Instruments”**

10:20 *Dr. Holger Fröhlich*  
Bonn-Aachen International Center for Information Technology (B-IT)  
**“From High-Throuput Data to Systems Biology”**

10:40 – 11:10 **coffee break**

11:10 *Prof. Dr. Martin Hofmann-Apitius*  
Bonn-Aachen International Center for Information Technology (B-IT)  
& Fraunhofer Institute for Algorithms and Scientific Computing SCAI  
**“Unstructured Information Mining as a Basis for Modelling and in Silico Experimentation”**

11:30 *Dr. Kurt Hoffmann*  
Institute of Molecular Biotechnology (IMB), RWTH-Aachen University  
c/o Fraunhofer IME  
**“Alma-in-Silico, Towards an Euregional Operational Structure for Sharing and Coordinating Academic and Industrial Competences for Services, Training and Cooperative Research in Systems Biology”**

- 11:50 *Dr. Christian Kandt*  
Bonn-Aachen International Center for Information Technology (B-IT)  
"The Molecular Basis of Multi-drug Resistance - Insights from Computational Structural Biology"
- 12:10 *Karl N. Kirschner, Ph.D.*  
Fraunhofer Institute for Algorithms and Scientific Computing SCAI  
"Computational Chemical Engineering by Multiscale Modelling – Research and Services"
- 12:30 – 13:30 **lunch break**
- 13:30 *Prof. Dr. Maik Kschischo*  
University of Applied Sciences Koblenz  
"A Mathematical Model for Potassium Homeostasis in *Saccharomyces Cerevisiae*"
- 13:50 *Dr. Christian Lemmen*  
BioSolveIT GmbH  
"Synthetically Accessible Compound Spaces"
- 14:10 *Dr. Heiko Schoof*  
Max-Planck-Institute for Plant Breeding  
& University of Bonn  
"Making Connections: Data Integration, Web Services, Phylogenies and High-Throughput Data Interpretation"
- 14:30 *Prof. Dr. Joachim Schultze*  
Laboratory for Genomics and Immunoregulation LIMES, University of Bonn  
"Combining Genomics and Bioinformatics to Reach the Next Level of Leukemia Diagnostics"
- 14:50 – 15:10 **coffee break**
- 15:10 *Prof. Thomas Wiehe*  
Institute for Genetics, University of Cologne  
"Rates and Patterns of Horizontal Gene Transfer"
- 15:30 *Prof. Dr. Thomas Wienker*  
University Hospital of Bonn  
"Quality Control and Genetic Interaction Analysis of Microarray SNP Data"
- 15:50 *Dipl. Inform. Jörg Zimmermann*  
Institute of Computer Science III, University of Bonn  
"Gene Network Analysis"
- 16:10 *Dr. Olav Zimmermann*  
Jülich Supercomputing Centre  
"Opportunities and Challenges for HPC in the Life Sciences"
- 16:30 *Prof. Dr. Martin Hofmann-Apitius*  
"Conclusions and Closing of the Mini-Symposium"