

General Information

Organizing Committee

Dario Anselmetti (Physics)
 Wolf-Jürgen Beyn (Mathematics)
 Karsten Niehaus (Biology)
 Alfred Pühler (Biology)
 Norbert Sewald (Chemistry)
 Jens Stoye (Bioinformatics)

all Bielefeld University

Registration deadline

30.04.2006

Registration form can be found at

<http://www.cebitec.uni-bielefeld.de>

For further information please contact

E-Mail: norbert.sewald@uni-bielefeld.de
<http://www.cebitec.uni-bielefeld.de>

Accommodation

Tourist-Information im Neuen Rathaus
 Niederwall 23, 33602 Bielefeld
 Tel: 0521 - 516999
 E-Mail: touristinfo@bielefeld-marketing.de
<http://www.bielefeld.de/en/ti/>



General Information

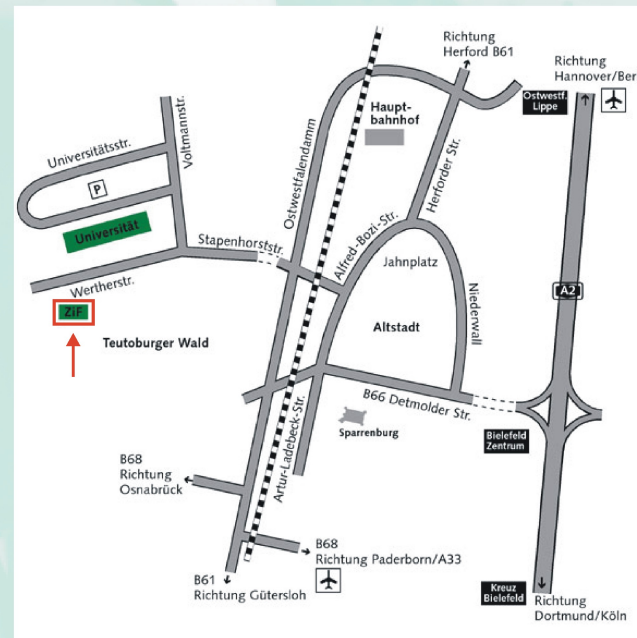
Location

Center for Interdisciplinary Research (ZiF)
 Wellenberg 1
 33615 Bielefeld
<http://www.uni-bielefeld.de/ZiF>

Arrival

By car: Take the A 2 Dortmund - Hanover, exit at "Bielefeld-Zentrum", follow the street signs towards the center ("Zentrum"), and from there follow the signs to "Werther". From the "Wertherstraße", the ZiF is on the left side on the slope of the hill. The entrance is signposted.

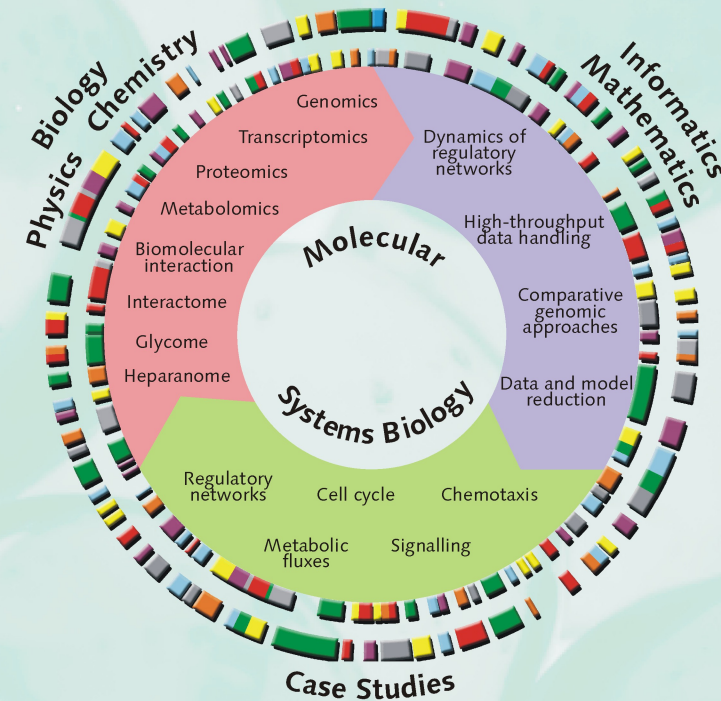
By train: Bielefeld main railway station; tram (Straßenbahn) line 4 to station "Universität" (ca. 7 min); footway to ZiF is signposted.



Workshop

Molecular Systems Biology

Bielefeld June 06 - 09, 2006

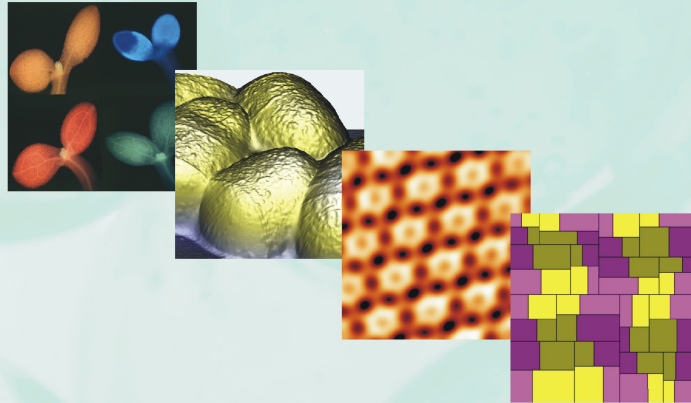


at

Bielefeld University,
 Center for Interdisciplinary Research (ZiF)

Invitation

In *Molecular Systems Biology* the quantitative understanding of complex and controlled biological processes at the cellular level requires a deep insight about the relationships of the overall functional information of the diverse genetically programmed and dynamically regulated networks. Scientists from molecular biology, mathematics, bioinformatics, chemistry and physics will have to combine their research expertise to work on this long-term objective of a quantitative real-time description of all relevant, non-linear and dynamic cell networks. Besides the integral analysis of an entire cell at all different levels of organisation (genome, transcriptome, proteome, metabolome) the ultimate goal is the generation of computational cell models that can predict the effect of a perturbation to a cell, its dysfunction and the origin and fundamentals of biological adaptability and the robustness of life.



Workshop topics

Opening Session

- Challenges of Systems Biology

Biology Sessions

- Data Generation and Data Processing for Biological Systems
- Systems Biology of Biotechnologically Relevant Microorganisms
- Molecular Systems Biology of Plants
- Molecular Systems Biology of Animals
- Case Studies

Chemistry / Physics Sessions

- Systems Nanobiology
- Chemistry and Molecular Systems Biology
- Glycomics

Informatics / Mathematics Sessions

- Modeling and Simulation
- Regulation of Networks
- Model Analysis

Confirmed Invited Speakers

- Lilia Alberghina, Milano, Italy
- Dario Anselmetti, Bielefeld, Germany
- Anke Becker, Bielefeld, Germany
- Ben Cravatt, La Jolla, USA
- Thomas Dierks, Bielefeld, Germany
- Gabriele Fischer von Mollard, Bielefeld, Germany
- Ernst Dieter Gilles, Magdeburg, Germany
- Michael Hecker, Greifswald, Germany
- Volkhard Helms, Saarbrücken, Germany
- Leroy Hood, Seattle, USA
- Dirk Inze, Gent, Belgium
- Hidde de Jong, Saint Ismier cedex, France
- Ralf Kelle, Künsebeck, Germany
- Andreas Kremling, Magdeburg, Germany
- Ursula Kummer, Heidelberg, Germany
- Luke Lee, Berkeley, USA
- Wolfgang Marwan, Magdeburg, Germany
- Karsten Niehaus, Bielefeld, Germany
- Dieter Oesterhelt, Martinsried, Germany
- Rainer Pepperkok, Heidelberg, Germany
- Alfred Pühler, Bielefeld, Germany
- Sven Rahmann, Bielefeld, Germany
- Markus Sauer, Bielefeld, Germany
- Norbert Sewald, Bielefeld, Germany
- Richard Smith, Calgary, Canada
- Andreas Tauch, Bielefeld, Germany
- Jens Timmer, Freiburg, Germany
- An-Ping Zeng, Braunschweig, Germany

Goals of the ZiF-Workshop

The goal of the workshop is manifold and contains the following issues:

- bring together leading scientists from the research field *Molecular Systems Biology*
- discuss the latest scientific results and future research strategies
- foster interdisciplinary collaboration
- motivate young students and researchers
- introduce and integrate Bielefeld University into the International Systems Biology community

