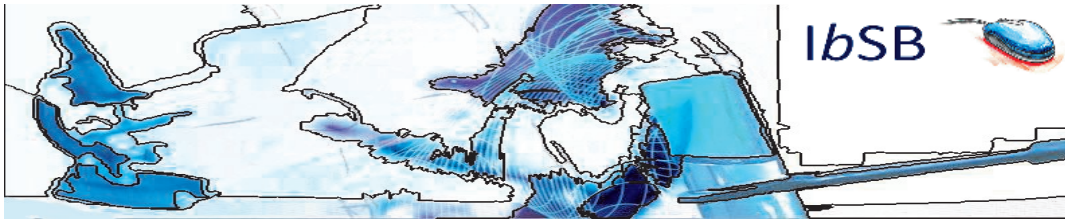
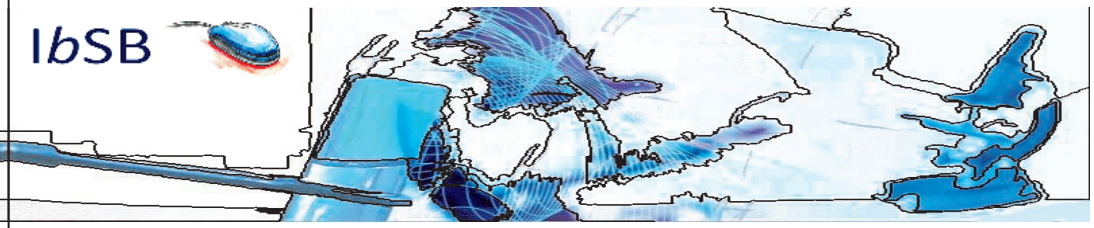




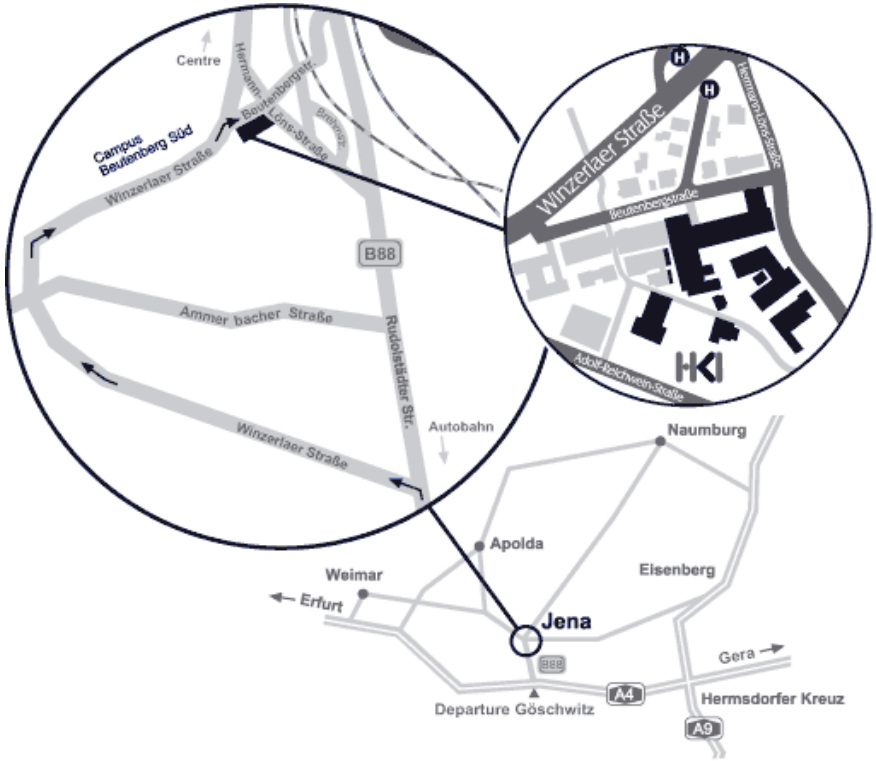


Image - based Systems Biology

Workshop

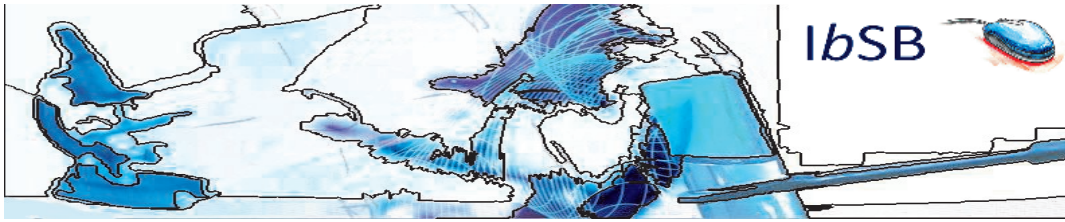
September 19, 2012
Jena
Germany

Organization

Research Group Applied Systems Biology
Marc Thilo Figge
Franziska Mech
Zeinab Mokhtari
Johannes Pollmächer
Teresa Lehnert

www.image-based-systems-biology.com

Satellite Workshop of the German Conference on Bioinformatics 2012



The general experience that „*a picture is worth a thousand words*“ also holds in the field of Systems Biology. The vast amount of image data which is generated by microscopy experiments of biological processes represents a firm data basis that contains important information on spatio-temporal aspects of these processes.

Image-based Systems Biology is a connecting link in joint studies of experiment and theory involving two main aspects:

(1) the automatized analysis of image sequences for highthroughput scanning of large data sets on biological processes, and

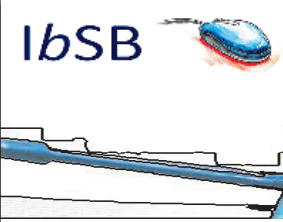
(2) the integration of spatio-temporal information into modeling approaches and computer simulations of biological processes.

This workshop brings together researchers from all fields of biology with the aim to provide a platform for exchange of scientific methods and recent achievements.

Deadlines

Abstract: June 15, 2012
Registration: August 15, 2012

Please visit the workshop website for more information:
www.image-based-systems-biology.com



Invited Speakers

Prof. Dr. Joachim Denzler
Chair for Computer Vision
Friedrich Schiller University Jena

Topic: **Novelty Detection in Biological Data using Gaussian Processes**

Dr. Jörg Lücke
Computational Neuroscience and Machine Learning Group,
Frankfurt Institute for Advanced Studies (FIAS),
Goethe University Frankfurt

Topic: **Introduction to Machine Learning Methods for Image Analysis**

Dr. Daniel H. Rapoport
Cell Technology,
Fraunhofer Research Institution for Marine Biotechnology Lübeck

Topic: **Image based methods for turning cell culture into numbers**

Prof. Dr. Ingo Röder
Institute for Medical Informatics and Biometry
Technical University Dresden

Topic: **Automatic tracking and quantification of dynamic cellular characteristics**

Leibniz Association | JSMC | JCB Jena Centre for Bioinformatics | Joining Evolution Networks Algorithms

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