IbSB 2014 Program

Thursday 25 September

12.00   Registration opens

13.00   Opening

Session: Image-derived Models of Spatial Organization

13.10-13.55   **Robert F. Murphy**, Carnegie Mellon University and Albert Ludwig University of Freiburg

Image-derived spatiotemporal models of subcellular organization differentiation and perturbation

13.55-14.40   **Jean-Christophe Olivo-Marin**, Institut Pasteur

Colocalisation analysis of biomolecules

14.40-15.00   **Thomas Zerjatke**, Technical University Dresden

Comparison of image-based measures on spatial heterogeneity in ESC colonies

15.00-15.30   Coffee break

Session: Automated Image Segmentation and Classification

15.30-16.15   **Stephen J. McKenna**, University of Dundee

Automating the analysis of histopathology images

16.15-16.35   **Haiyue Yu**, University of Oxford

Automatic assessment of immuno-fluorescent tissue image quality using a machine learning approach

16.35-16.55   **Adrian Friebel**, University of Leipzig

Quantification of liver tissue by image processing

16.55-17.15   **Stefan Helfrich**, Forschungszentrum Jülich GmbH

Investigating single-cell growth of microbial cell factories: is counting cells enough?

17.30   Poster session and barbecue

Friday 26 September

Session: Cell Tracking Approaches

09.00-09.45   **Karl Rohr**, University of Heidelberg, BIOQUANT, IPMB, and DKFZ

*Tracking and registration for automatic analysis of
live cell image data*

09.45-10.05   **Damian Stichel**, University of Heidelberg

Analysis of migrating NSCLC cells using particle image velocimetry

10.05-10.25   **Konstantin Thierbach**, Technical University Dresden

Cell tracking accuracy - quantification and consequences

10.25-10.55   Coffee break

Session: Analysis of Image-derived Cell Shape and Migration

10.55-11.40   **Till Bretschneider**, University of Warwick

Mapping amoeboid cell migration

11.40-12.00   **Zoltan Cseresnyes**, German Rheumatism Research Center (DRFZ)

*Fourier transform-based fast characterization of cell shapes as a
tool for intelligent classification of cells in intravital microscopy*

12.00-12.20   **Marco Körner**, Friedrich Schiller University of Jena

*Behavioral classification of cells by observing their
spatial dynamics: a self-similarity approach*

12.20-13.45   Lunch break

Session: Image-derived Models of Cellular Dynamics and Interactions

13.45-14.30   **Joost Beltman**, Netherlands Cancer Institute

Analyzing and modelling immune cell migration

14.30-14.50   **Szymon Stoma**, INRIA and ETH Zürich

*Image-based modeling of drug delivery in
HeLa multicellular spheroids*

14.50-15.10   **Jan Hasenauer**, Helmholtz Zentrum München

*Model-based outliers treatment in image-based systems biology:
filtering vs. noise model*

15.10   Closing