# GPSRS Internal workshop, Aarhus

# Monday 8 April 2013

### **Invited lecture**

09:00 – 10:00 Francois Bacelli (Paris): A class of spatial birth and death processes related to the random connection model

### Tessellations and hard-core particle systems

10:00 – 10:45 **Günter Last** (Karlsruhe): Introduction into some recent developments on random tessellations

10:45 – 11:00 *Coffee* 

- 11:00 11:30 Eva Ochsenreither (Karlsruhe): Second order properties of percolation on tessellations
- 11:30 12:15 Gerd Schröder-Turk (Erlangen): Physical Foams and mathematical random tessellation models
- 12:15 12:30 *Discussion* of the project for the planned second stage of the Research Unit 12:30 *Lunch*

#### **Tensor valuations**

- 14:00 14:30 René Wittmann (Erlangen): Mixed measures for density functional theories
- 14:30 15:30 Daniel Hug (Karlsruhe): Some new results for tensor valuations
- 15:30 16:00 Coffee
- 16:00 16:45 Julia Hörrmann (Karlsruhe): Densities of tensor valuations for inhomogeneous Boolean model
- 16:45 17:00 Discussion of the project for the planned second stage of the Research Unit
- 17:00 17:30 Overall Discussion of the two projects (In room Koll D)

# **Tuesday 9 April 2013**

# Image analysis and spatial statistics

09:00 – 09:45 **Michael Klatt** (Erlangen): Karambola and Papaya: a practical demonstration of the Erlangen Minkowski tensor software

09:45 - 10:15 Markus Kiderlen (Aarhus): Digital stereology

10:15 – 10:30 Coffee

10:30 – 11:00 Discussion of the projects for the planned second stage of the Research Unit

### Random fields and percolation

11:00 – 11:30 **Eva B. Vedel Jensen** (Aarhus): Lévy random fields 11:30 – 12:00 **Günter Last** (Karlsruhe): Some analytic properties of the infinite cluster of a Boolean model 12:00 *Lunch* 

14:00 – 15:00 Discussion of the project for the planned second stage of the Research Unit 15:00 – *Excursion* 

Workshop dinner

# Wednesday 10 April 2013

## **Boolean models**

09:00 – 09:45 **Daniel Hug** (Karlsruhe): Second order properties of the Boolean model 09:45 – 10:00 *Coffee* 

10:00 – 10:45 Klaus Mecke (Erlangen): Percolation and anisotropic Boolean models

10:45 – 11:00 *Discussion* of the project for the planned second stage of the Research Unit

11:00 – 12.00 Concluding strategic discussion

12:00 Lunch

*All lectures take place in the* Department of Mathematics, Building 1531, room 219 (**Aud. D4**) Aarhus University.