
CSGB
CENTRE FOR STOCHASTIC GEOMETRY
AND ADVANCED BIOIMAGING
AU Workshop
on Stochastic Geometry,
Stereology
and their Applications

Programme

Sunday 5 June

14:00-18:00 Registration

18:00 Dinner

Monday 6 June

08:00-08:50 Breakfast

08:50-09:00 Opening

09:00-09:45 **Wilfrid Kendall**: Scale-invariant random spatial networks (SIRSN) from line patterns

09:45-10:15 **Günter Last**: On the random connection model

10:15-10:45 Coffee

10:45-11:15 **Anders Rønn-Nielsen**: Tail asymptotics and excursion sets for infinitely divisible random fields

11:15-11:45 **Julia Hörrmann**: Intensity estimation in non-isotropic Boolean models via harmonic intrinsic volumes

11:45-12:15 **Pierre Houdebert**: Continuum random cluster model

12:15-15:00 Lunch break

15:00-15:30 **Jiří Dvořák**: Cluster reconstruction and parameter estimation for Neyman-Scott point processes

15:30-16:00 **Daryl Daley**: A density for Matérn's hard-core model II

16:00-16:30 Coffee

16:30-17:00 **Johan Debayle**: Estimation of the shape variations of the typical grain within a Boolean Model

17:00-17:30 **Jon Sporring**: Statistical analysis of synaptic vesicles in electron microscopy images

17:30-18:00 **Jan Niedermeyer**: Estimation of fibre length distribution from CT data using fibre endpoints

18:30 Dinner

20:00-22:00 Get-together

Tuesday 7 June

08:00-09:00	Breakfast
09:00-09:30	**Rolf Schneider**: *SO(n)* covariant local tensor valuations on convex bodies
09:30-10:00	**Daniel Hug**: On Kendall's problem in spherical space
10:00-10:30	**Jan Rataj**: On some classes of sets admitting curvature measures
10:30-11:00	Coffee
11:00-11:30	**Klaus Mecke**: Integral geometry of fractals: scaling behavior of Minkowski functionals
11:30-12:00	**Anne Marie Svane**: Crofton type formulas for Minkowski tensors
12:00-15:00	Lunch break
15:00-15:30	**Mark Podolskij**: Ambit fields
15:30-16:00	**Andreas Basse-O'Connor**: Limit theorems for a class of stationary increments Lévy driven moving averages
16:00-16:30	Coffee
16:30-17:00	**Astrid Kousholt**: Shape from surface tensors
17:00-17:30	**Benjamin Reichenwallner**: Volumes of convex hulls of $n \leq d+1$ points in d-dimensional convex bodies
17:30-18:00	**Vitalii Makogin**: On the covariance functions of Gaussian self-similar random fields with stationary rectangular increments
18:30	Dinner
20:00-20:30	Poster flash introduction
20:30-22:00	Poster session

Wednesday 8 June

08:00-09:00	Breakfast
09:00-09:30	**Tomáš Mrkvička**: Several new issues about global envelope tests
09:30-10:00	**Ege Rubak**: Point patterns on the sphere
10:00-10:30	**Thordis L. Thórarinsdóttir**: Full Bayesian inference for cluster point processes
10:30-11:00	Coffee
11:00-11:30	**Viktor Beneš**: Spatial interaction facet processes, asymptotics and statistics
11:30-12:00	**Werner Nagel**: STIT tessellation processes – ergodic properties in space and Markov properties in time
12:00-18:00	Lunch break and excursion
18:30	Dinner

Thursday 9 June

08:00-09:00	Breakfast
09:00-09:45	**Adrian Baddeley**: Weighting principles
09:45-10:00	Break
10:00-10:45	**Wolfgang Weil**: Integral geometry of local functionals
10:45-11:15	Coffee
11:15-12:00	**Richard Gardner**: The dual Brunn-Minkowski theory
12:00-15:00	Lunch break
15:00-15:45	**Jesper Møller**: Second-order pseudo-stationary random fields and point processes on graphs and their edges
15:45-16:15	Coffee
16:15-17:00	**Michaela Prokešová**: Profile contrast estimation for space-time cluster point processes
17:00-17:15	Break
17:15-18:00	**Marie-Colette van Lieshout**: Stochastic geometry models for image analysis
19:00	Conference dinner
21:00	Get together

Friday 10 June

08:00-09:00	Breakfast
09:00-09:45	**Jens R. Nyengaard**: Implementation of volume tensors in microscopy for estimating particle shape and orientation
09:45-10:00	Break
10:00-10:45	**Aasa Feragen**: Probabilistic tractography as distributions over paths: a Gaussian processes approach
10:45-11:15	Coffee
11:15-11:45	**Karl-Anton Dorph-Petersen**: Prediction of the variance of stereological volume estimators in systematic sampling with errors in sampling locations
11:45-12:15	**Asger Hobolth**: Inferring population history from DNA sequences: Methods, models and challenges. And spatial statistics?
12:15	Lunch break and departure

Posters

Ilona Berkova: Recognition of spatial relationships of companies by local scaling

Sabrina Tang Christensen: Comparison of global algorithms for Minkowski tensor estimation

Julie Fournier: Deformations of Gaussian random fields: study based on the mean Euler characteristic of excursion sets

Kassel Liam Hingee: TBA

Rodolfo Gameros Leal: Traffic behaviour over the Poissonian city

André Liebscher: Point process based detection of drug induced cell morphology changes

Zbynek Pawlas: Second-order characteristics of random marked closed sets