Serik Sagitov, SERIK@CHALMERS.SE Göteborg, 9 September 2022

Mathematics of Life Sciences

at

Mathematical Sciences

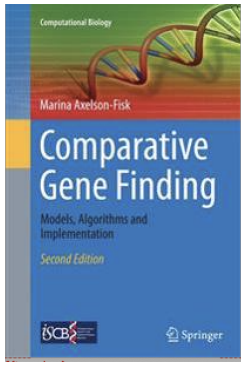
Chalmers and University of Gothenburg

Click here

Bioinformatics and statistical genetics

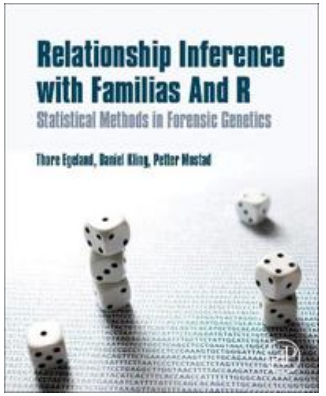
Erik Kristiansson

- Comparative meta-genomics
- Antibiotic resistance bacteria using genome sequencing
- Large-scale data from next generation DNA sequencing



Marina Axelson-Fisk

- Biological sequence analysis
- Cross-species gene finding
- Protein domain prediction



Petter Mostad

- Bayesian statistics and neural networks
- Forensic statistics
- Paternity DNA testing

Rebecka Jörnsten

- Large-scale network models for human cancer
- Clustering and data integration in systems biology
- Model selection

Aila Särkkä

- Spatial statistics for spatio-temporal data
- 3D microscopy point pattern data with replicates
- Materials science and neurology

Ottmar Cronie

- Spatial and spatio-temporal statistics
- Stochastic geometry
- Statistical learning for epidemiology

Marija Cvijovic

- Systems biology of protein-folding diseases
- Studying cellular ageing using computational methods
- Experimental methods to study the ageing of budding yeast

Eszter Lakatos (starting in March 2023)

- Computational biology
- Cancer evolution and cancer genomics
- Immuno-oncology

Bernt Wennberg

- Interacting particle systems
- Human lipoprotein kinetics
- Biological swarm models

Umberto Picchini

Bayesian methods for models with intractable likelihoods
Stochastic differential models with applications to physiology
Markov chain Monte Carlo algorithms

Moritz Schauer

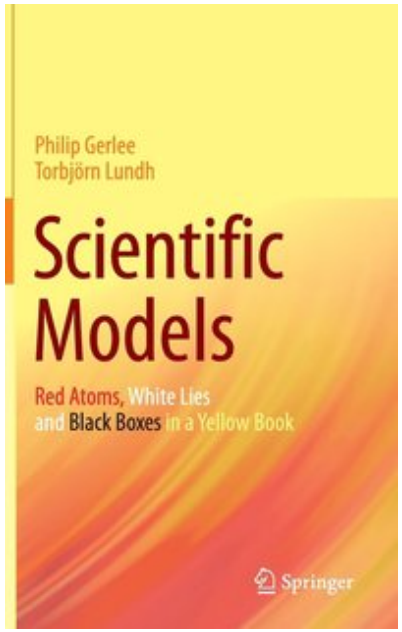
Stochastic differential equations
Evolution of systems with temporal and spatial interactions
Bayesian approaches to inference

Tobias Gebäck

SuMo Biomaterials research center
Mass transport in soft, porous materials
Modeling of radiation treatment of cancer tumours

Torbjörn Lundh

- Morphogenesis and general pattern-formation
- Artificial life, evo-devo, speciation
- Game theory



Philip Gerlee

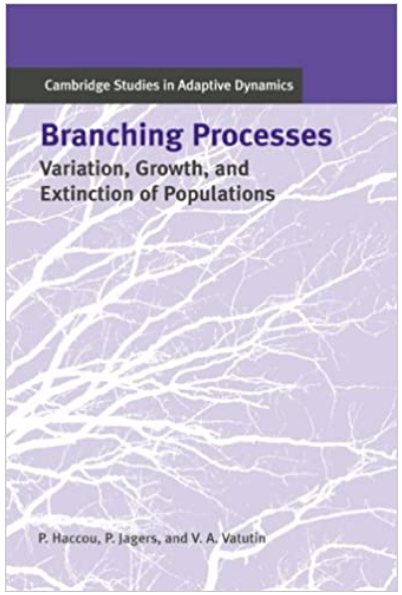
- Cancer modeling
- Mathematical aspects of evolution and ecology
- Applications of game theory to biology

Jenny Larsson

- Quantifying shapes in biological structures
- Variation in shape found in snail shells at a population level
- Snail adaptation to different environments

Julie Rowlett

- Geometric features and partial differential equations
- Biodiversity of marine microbes
- Evolution of cooperation



Peter Jagers

- Extinction and growth of populations
- Branching PCR processes
- Stable age structure of populations

Serik Sagitov

- Coalescent processes in population genetics
- Mathematical phylogenetics
- Branching processes and population models