10th International Workshop on Machine Learning In Systems Biology (MLSB 2016)

Program

Saturday, September 3

9:15   Opening & Announcements
Juho Rousu

Session 1   Aalt-Jan van Dijk, Chair

9:30   **Keynote: Lodewyk Wessels**
”Molecular networks and therapy response”

10:30   Coffee

11:00   Mehmet Gönen, ”Integrating gene set analysis and nonlinear predictive modeling of disease phenotypes using a Bayesian multitask formulation”

11:30   Otte Heinävaara, Janne Leppä-Aho, Jukka Corander and Antti Honkela, ”On the inconsistency of l1-penalised sparse precision matrix estimation”

12:00   Spotlight presentations

12:30   Lunch

Session 2   Harri Lähdesmäki, Chair

13:30   Daniela Börnigen, Svitlana Tyekucheva, Xiaodong Wang, Jennifer Rider, Gwo-Shu Lee, Lorelei Mucci, Christopher Sweeney and Curtis Huttenhower, ”Computational reconstruction of NFkB pathway interaction mechanisms during prostate cancer”

14:00   Alexey Gritsenko, Shira Weingarten-Gabbay, Shani Elias-Kirma, Ronit Nir, Dick de Ridder and Eran Segal, ”Predicting Internal Ribosome Entry Site (IRES) activity from sequence”

14:30   Saulius Lukauskas, Roberto Visintainer, Gabriele Schweikert and Guido Sanguinetti, ”DGW: an exploratory data analysis tool for clustering and visualisation of epigenomic marks”

15:00   Coffee

15:30   **Keynote: Jukka Corander**
”100 years after William Bateson — what can we learn about epistasis by today's statistical machine learning?”

16:30-18:00   Posters and drinks

Sunday, September 4

Session 3   Dick de Ridder, Chair

9:00   **Keynote: Yvan Saeys**
”Inferring cell developmental trajectories from high-throughput single cell data”

10:00	Yuanhua Huang and Guido Sanguinetti, "Statistical modeling of isoform splicing dynamics from RNA-seq time series data"
10:30	Coffee
11:00	Simone Daminelli, Josephine Thomas, V. Joachim Haupt, Claudi Duran, Michael Schroeder and Carlo Vittorio Cannistraci, "How network topological models influence drug-target prediction"
11:30	Sung Hee Park, Sung-Min Lee, Young-Joon Kim and Sangsoo Kim, "ChARM: Discovery of combinatorial chromatin modification patterns in hepatitis B virus X-transformed mouse liver cancer using association rule mining"
12:00	Spotlight presentations
12:30	Lunch
Session 4	Juho Rousu, Chair
13:30	Posters
14:30	Severine Affeldt, Nataliya Sokolovska, Edi Prifti and Jean-Daniel Zucker, "Spectral Consensus Strategy for Accurate Reconstruction of Large Biological Networks"
15:00	Coffee
15:30	André Veríssimo, Arlindo L. Oliveira, Marie-France Sagot and Susana Vinga, "DegreeCox: a network-based regularization method for survival analysis"
16:00	**Keynote: Ziv Bar-Joseph** "Distributed gradient descent in bacterial food search"
17:00-17:10	Closing