

# Programme for MASAMB 2011 (including abstracts)

# **MONDAY 11TH APRIL**

11:00 - 13.45 12:45 - 13.45 13:45 - 14:00	Registration Lunch Welcome and Introduction	
SESSION 1 Population Genetics (NGS, SNPs and Structural Variation) CHAIR: Joachim Hermisson		
14:00 - 14:20	Peter Arndt, "Bayesian SNP polarisation"	р. З
14:20 - 14:40	Andreas Futschik, "Optimal pooling strategies for SNP detection using next generation sequencing"	p. 4
14:40 - 15:00	Luca Ferretti, Sebastian Ramos-Onsins and Miguel Perez-Enciso "Population genomics from next generation sequencing data"	p. 4
15:00 - 15:20	<b>Ines Hellmann</b> , Olaf Thalmann, Anne Fischer and Linda Vigilant "Effects of sex-biased evolution on patterns of diversity in apes"	p. 6
15:20 - 15:40	<b>Botond Sipos</b> , Tim Massingham and Nick Goldman "Sequencing of repetitive genomic DNA aided by mutagenesis - a simulation study"	p. 8
15:40 - 16:00	Lorenz Wernisch, Klaudia Walter and Matt Hurles "Hierarchical Bayesian classifier for inferring genomic deletions"	p. 9

### COFFEE BREAK

SESSION 2 Evolutionary Genomics and Sequence Analysis CHAIR: Jonathan Bollback		
16:30 - 16:50	<b>Richard Goldstein</b> , Asif Tamuri and Mario Dos Reis "Characterising selection coefficients using from site- and time-dependent substitution models"	p. 5
16:50 - 17:10	James Allen, and Simon Whelan "Quantifying the effect of evolution and genomic alignment on de novo RNA gene prediction"	р. 3
17:10 - 17:30	Anne Kupczok, and Jonathan Bollback "Modeling the Evolutionary Dynamics of CRISPR spacers"	p. 7

### POSTER SESSION + WINE

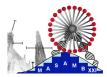
20:00 - open end	Conference Dinner at MARX Restauration











## **TUESDAY 12TH APRIL**

# SESSION 3 Gene expression and RNA-Seq CHAIR: Christian Schlötterer

0.00 0.00	Peter Glaus, Antti Honkela and Magnus Rattray "Estimating differential	p. 5
9:00 - 9:20	expression of transcripts with RNA-seq by using Bayesian Inference"	•
9:20 - 9:40	Shengyu Ni, "Gene expression comparison between RNA-seq and	р. 8
9.20 - 9.40	microarrays based on ranked genes list"	
9:40 - 10:00	Simon Anders, Alejandro Reyes and Wolfgang Huber "Studying	р. З
	alternative isoform regulation with RNA-Seq"	
10:00 - 10:20	Alex Lewin, and Ernest Turro "MMSEQ: Haplotype and isoform specific	p. 8
	expression estimation using multi-mapping RNA-seq reads"	

#### COFFEE BREAK

SESSION 4 Genomic CHAIR: Andreas Fut	es and Parameter Selection tischik
11:00 - 11:20	Verena Zuber, and Korbinian Strimmer "Improving biomarker discover taking account of correlation: the CAT-CAR approach"
	Election Frommlet, Ealiy Dubaltinger and Readen Malgorzata "Revea

11:00 - 11:20	taking account of correlation: the CAT-CAR approach"	p. 9
11:20 - 11:40	Florian Frommlet, Felix Ruhaltinger and Bogdan Malgorzata "Bayes optimal selection rules under sparsity with applications in GWAS"	p. 4
11:40 - 11:50	Vote / Announcement of next MASAMB meeting	

#### SHORT BREAK (group photograph, no cofee)

SESSION 5 Systems Bio CHAIR: Magnus Rattray		
12:00 - 12:20	Elisenda Feliu, and Carsten Wiuf "Enzyme sharing as a cause of multistationarity in signaling systems"	p. 4
12:20 - 12:40	Thomas Thorne, and Michael Stumpf "Sequential Monte Carlo samplers for biological network inference"	p. 9
12:40 - 13:00	James Hensman, Magnus Rattray and Neil Lawrence "Functional nonparametric clustering of irregularly sampled gene expression time series"	p. 6
LUNCH BREAK		
SESSION 6 Systems Bic CHAIR: David Kreil	ology II	
14:00 - 14:20	<b>Emma Cooke</b> , Richard S Savage, Paul D W Kirk and David L Wild "Bayesian Hierarchical Clustering for Microarray Time Series Data with Replicates and Outlier Measurements"	р. З
14:20 - 14:40	Maxime Garcia, Olivier Stahl, Pascal Finetti, Daniel Birnbaum, François Bertucci and Ghislain Bidaut "Biomarkers Discovery in Breast Cancer by Interactome-Transcriptome Integration"	p. 5
	Julia Lassarra Alexander Zien, Klaus-Robert Müller and Martin Vingron	n 7

14:40 -15:00	Julia Lasserre, Alexander Zien, Klaus-Robert Müller and Martin Vingron "ProARTS: towards unfolding the structure of the sequence around human transcription start sites"	р. 7
15:00 - 15:20	Alexey Stukalov, and Jacques Colinge "Bayesian Inference of Protein Complexes from Mass Spectrometry Data"	p. 9
15:20 - 15:40	Heather Harrington, Gian Michele Ratto and Michael Stumpf "Spatio- temporal models of Erk1 and Erk2 in vivo"	p. 6
15:40 - 16:00	Antti Honkela, Neil Lawrence and Magnus Rattray "Hierarchical Gaussian Process Models of Gene Expression and Transcriptional Regulation"	р. 7

#### **CLOSING STATEMENTS**







