Workshop Dec. 6-7, 2010

Random Trees, Polymers and Networks in Biology

Monday Dec. 6

09.00 - 09.45 S. Franz: Adaptation in a varying fitness landscape

09.55 - 10.40 M. Lässig: Tree and dynamics of the influenza virus

10.40 - 11.00 Coffee

11.00 - 11.45 A. Martin-Löf: Asymptotic distribution for the size of a near critical epidemic

11.55 - 12.25 M Luksza: Statistics for clustering in gene expression data: from statistical significance to biological relevance

12.25 - 14.00 Lunch

14.00 - 14.45 S. Thurner: Linear model of gene activity with nonlinear constraints

14.55 - 15.40 K. Wiese: Fractional Brownian motion in presence of absorbing boundaries

15.40 - 16.00 Coffee

16.00 - 16.30 M. Zagorski: Model gene regulatory networks under mutation-selection balance

16.40 - 17.10 E. Aurell: Network aspects of chromosome interactomes

Tuesday Dec. 7

09.00 - 09.45 E. Gudowska-Nowak: Random walks and paradoxical diffusion

09.55 - 10.40 J. Wheater: Simple models for scale dependent spectral dimension

10.40 - 11.00 Coffee

11.00 - 11.45 I. Simonsen: Power blackouts and the domino effect: real-life examples and modeling

11.55 - 12.25 B. Waclaw: A dynamical phase transition in a model for evolution with migration

12.25 - 14.00 Lunch

14.00 - 14.30 J. Ochab: Epidemic thresholds for a static and dynamic small-world network

14.40 - 15.10 B. Thatte: Some identifiability questions on reconstructing population pedigrees

15.10 - 15.40 Coffee

15.40 - 16.25 F. David: Random matrices, spin decoherence and random walks

17.00 Wine and snacks