

SKM-Symposium Statistical Physics and Biological Evolution (SKM-SYBE)

jointly organized by
the Biological Physics Division (BP) and
the Dynamics and Statistical Physics Division (DY)

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The last decades have seen rapid progress in molecular biology. In particular the complete sequencing of genomes produces a wealth of biological data. The molecular processes involved in the reproduction, expression, and rearrangement of genetic material are of breathtaking complexity, and their control and feedback mechanisms are being unraveled at an accelerating pace. Physics contributes significantly to this development, both through novel experimental techniques and by applying methods of statistical physics to analyze data and model evolutionary processes. The symposium brings together leading experts in the field, who will explore the patterns of biological evolution from the level of individual proteins to microbial populations in the laboratory.

Overview of Invited Talks and Sessions

(lecture room TRE Math)

Invited Talks

SKM-SYBE 1.1	Fri	10:30–11:00	TRE Ma	Microbial evolution in spatially-structured environments — •ARJAN DE VISSER
SKM-SYBE 1.2	Fri	11:00–11:30	TRE Ma	Correlated mutations: Facts or artifacts? — •AMNON HOROVITZ
SKM-SYBE 1.3	Fri	11:30–12:00	TRE Ma	Macroscopic laws in bacterial genome evolution — •ERIK VAN NIMWEGEN
SKM-SYBE 1.4	Fri	12:00–12:30	TRE Ma	The role of horizontal gene transfer in the evolution of bacterial genomes — •PAUL HIGGS

Sessions

SKM-SYBE 1.1–1.4	Fri	10:30–12:30	TRE Ma	Statistical Physics and Biological Evolution
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