

Programme Geilo School, 10-20 April, 2007

Theme: Evolution from Cellular to Social Scales

1st Day (Tuesday, 10 April)

- p.m. 14.30-18.00 Communal transportation from Oslo airport and Oslo to Geilo
18.30-19.30 Registration
19.30-20.00 Reception
20.00-21.00 Dinner
21.30-22.00 Arne T. Skjeltorp: Opening

2nd Day (Wednesday, 11 April)

- a.m. 08.30-10.30 Kim Sneppen: Introduction and perspectives to evolution
10.30-11.30 Joel Stavans: Keynote and lectures
Sex and Sensitivity
The (In)fidelity of Homologous Recombination
p.m. 15.30-17.30 Joel Stavans: Sex and Sensitivity
The (In)fidelity of Homologous Recombination (ctd.)
17.30-18.30 Author-attended posters (Group 1). Posters should be left on display until Saturday 14 April for informal discussions

3rd Day (Thursday, 12 April)

- a.m. 08.30-11.30 Richard Lenski: Experimental evolution: bugs and bytes
p.m. 15.30-17.30 Christoph Hauert: Evolutionary dynamics and the problem of cooperation
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

4th Day (Friday, 13 April)

- a.m. 08.30-09.30 Christoph Hauert: Evolutionary dynamics and the problem of cooperation (ctd.)
09.30-11.30 Sine Lo Svenningsen: Small RNA control of quorum sensing
p.m. 15.30-17.30 Johan Paulsson: A) How evolution shapes control circuits: cost-efficiency of feedback control
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

5th Day (Saturday, 14 April)

- a.m. 08.30-09.30 Mogens Hoegh Jensen: Dynamical genetic regulation
09.30-10.30 Sandeep Krishna: Network Models of Phage-Bacteria Co-Evolution
10.30-11.30 Ala Trusina: Similarities and differences in mammalian and yeast Unfolded Protein Response
p.m. 15.30-16.30 Johan Paulsson: B) How control circuits shape evolution: multileveled selection
16.30-17.30 Mikhail Ostrovsky: Evolution of vision
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

6th Day (Sunday, 15 April)

- a.m. Free
p.m. 17.30-18.30 Author-attended posters (Group 2) Posters should be left on display until Thursday 19 April for informal discussions

7th Day (Monday, 16 April)

- a.m. 08.30-11.30 Vadim Agol: The origin and evolution of viruses
p.m. 15.30-17.30 Johannes Berg: Bayesian Analysis of Biological Networks: Clusters, Motifs, and Cross-Species Correlations
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

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8th Day (Tuesday, 17 April)

- a.m.** 08.30-09.30 Johannes Berg: Bayesian Analysis of Biological Networks: Clusters, Motifs, and Cross-Species Correlations (ctd.)
09.30-11.30 Morten Kloster: Simple systems: dynamics of asexual evolution
- p.m.** 15.30-16.30 Morten Kloster: Simple systems: dynamics of asexual evolution (ctd.)
16.30-17.30 David Sherrington: Network growth models (Tentative)
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

9th Day (Wednesday, 18 April)

- a.m.** 08.30-10.30 Joseph McCauley: Evolution of financial markets and our ideas of financial markets.
10.30-11.30 Jarle Breivik: Genetic instability and the evolutionary dynamics of cancer
- p.m.** 15.30-16.30 Jarle Breivik: Genetic instability and the evolutionary dynamics of cancer (ctd)
16.30-17.30 Ivar Giaever: The Nobel Prize and the Future of Science (?)
17.30-18.30 Tutorial group meetings and informal discussions with lecturers

10th Day (Thursday, 19 April)

- a.m.** 08.30-11.30 Vladimir Skulachev: Biological aging as an evolutionary invention. Can the aging program be switched off?
- p.m.** 15.30-17.30 Brynjar Lia: Evolution of jihadist networks
17.30-18.30 Tutorial group meetings and informal discussions with lecturers
19:30 Geilo School Closing Dinner (Geilo Awards etc.)

11th Day (Friday, 20 April)

- a.m.** 08.30-09.15 Harry Thomas: Summary. Questions and discussions
- p.m.** 09.30-13.30 (approx.) Communal transportation of participants to Oslo for departure

Coffee breaks approximately 10.30 and 16.30

Lecturers should normally plan to have some short breaks every hour

Principal lecturers:

Vadim Agol	Institute of Poliomyelitis and Viral Encephalitides, Moscow, Russia
Johannes Berg	Institute for Theoretical Physics, University of Cologne, Germany
Jarle Breivik	Institute for Basic Medical Science, University of Oslo
Morten Kloster	University of California, San Francisco, USA
Mogens Hoegh Jensen	Niels Bohr Institute, Copenhagen, Denmark
Christoph Hauert	Harvard University, USA
Richard Lenski	Michigan State University, USA
Brynjar Lia	Norwegian Defence Research Establishment (FFI), Norway
Joseph McCauley	University of Houston, USA
Mikhail Ostrovsky	Institute of Biochemical Physics, Russian Academy of Sciences, Russia
Johan Martin Paulsson	Harvard University, USA
Vladimir Skulachev	Belozersky Institute of Physico-Chemical Biology, Moscow State University, Russia
Kim Sneppen	Niels Bohr Institute, Copenhagen, Denmark
Joel Stavans	Department of Physics of Complex Systems, Weizmann Institute of Science, Israel
Sine Lo Svenningsen	Princeton University, USA

Seminar lecturers:

Ivar Giaever	Applied BioPhysics, Troy, New York, USA
Sandeep Krishna	Niels Bohr Institute, Copenhagen, Denmark
David Sherrington	University of Oxford, UK
Ala Trusina	University of San Francisco, USA