

## Viral Evolution: Linking Genetics to Epidemics

**Friday 24 February** - Chair: Thomas Lengauer

15:00 - 18:45

**Sergey Kryazhimskiy**      Directionality and epistasis: How natural selection shapes the influenza A genome

*Coffee Break (30 min)*

**Michael Lässig**              Influenza A: Genomics of a red queen race

**Ville Mustonen**             Distinguishing Driver and Passenger Mutations in an Evolutionary History Categorized by Interference

*Break (20 min)*

**Trevor Bedford**             Canalization of the evolutionary trajectory of the human influenza virus

**Julia Gog**                     Age-structured model of influenza evolution

**Saturday 25 February** - Chair: Michael Lässig

09:00 - 13:00

**Oliver Pybus**                 Unifying the phylogeography and mathematical epidemiology of emerging epidemics

**Alice McHardy**             Phylodynamic techniques for the study of evolutionary dynamics of influenza A viruses'

**Annemie Vandamme**        Current controversies on the origin and adaptation of epidemic HIVs

*Coffee Break (30 min)*

**Richard Neher**             The recombination rate of HIV and the role of recombination in chronic infection

**Nico Pfeifer**                 Modeling HIV Evolution in Treatment-Naïve Patients

**Nico Beerenwinkel**         Estimating the structure of viral quasispecies from deep sequencing data

13:00 - 14:00 *Lunch*