23rd SFB 680 Seminar day on **Microbial Evolution**

23.6.2016

VENUE: Institute for Theoretical Physics (New Building), Zülpicher Str. 77a

14:00 **Berenike Maier**, Welcome address

14:05 **Hinrich Schulenburg,** Christian-Albrechts-Universität zu Kiel**,** Rapid de novo evolution of bacterial resistance to antibiotic combinations

14:50 **Mark Zwart**, Universität zu Köln, Chance and necessity in the evolution of antibiotic resistance

15:20 **Joachim Krug**, Universität zu Köln, Causes of epistasis in Fisher's geometric model

15:50 Coffee break

16:30 **Daniel Rozen**, Universität Leiden, Working towards understanding antibiotics outside of the clinic

17:15 **Torsten Held**, Universität zu Köln, Evolutionary limits to microbial complexity

17:45 **Karin Mitosch**, IST Austria, Klosterneuburg, Antibiotics-induced cross-protection at the single-cell level

18:30 Dinner (Catered buffet)

24.6.2016

VENUE: **Biocenter**, Zülpicher Str. 47b, Lecture Hall Ground Floor

09:00 **Tobias Bollenbach**, IST Austria Klosterneuburg, Quantitative determinants of antibiotic resistance evolution

09:45 **Fernanda Pinheiro,** Universität zu Köln, Fitness effects of lateral gene transfer

10:15 **Nadzeya Kouzel**, Universität zu Köln, Horizontal gene transfer in bacterial biofilms

10:45 Coffe break

11:05 **Tin Yau Pang,** Heinrich-Heine-Universität Düsseldorf, Analysis of *Escherichia coli* ancestral metabolic networks reveals past adaption

11:35 **Prasanna Bhogale**, Universität zu Köln, How does the lactose-uptake system switch?

12:05 **Christian Kost,** Max Planck Institute for Chemical Ecology Jena, Adaptive gene loss drives the evolution of metabolic dependencies within microbial communities

13:00 Lunch (Light sandwich) *at the* Institute *for Theoretical Physics (New Building)*