



CRC 1310 Midterm Meeting November 8-9, 2019

Friday, November 8

14:30 - 14:35 **Welcome and Introduction**

14:35 – 15:10 **Project B4**

Co-evolution of gut microbiota and immune cells during ageing in killifish

15:10 - 15:45 **Project A6**

Predictability of *E. coli* evolution in the mammalian gut

15:45 – 16:10 **Coffee Break**

16:10 - 16:45 **Project B1**

Against all odds: The evolution of HIV-1-directed broadly neutralizing antibodies

16:45 - 17:20 **Project B5**

Co-evolution of viruses and immune repertoires across scales

17:20 - 17:55 **Project B3**

Adaptive immune control of evolving pathogens

18:00 – 20:00 **Discussion and Dinner**

Saturday, November 9

09:00 - 09:35 **Project B2**

Predicting viral-immune co-evolution

09:35 - 10:10 **Project A1**

Cellular mechanisms of drug resistance evolution

10:10 - 10:35 **Coffee Break**

10:35 - 11:10 **Project A2**

Predicting evolutionary pathways to β -lactam resistance

11:10 - 11:45 **Project A3**

A predictive fitness model for cross-species evolution

11:45 - 12:20 **Project A4**

Metabolic fitness landscapes for evolutionary predictions

12:20 – 13:30 **Lunch discussion**

13:30 - 14:05 **Project A5**

Fitness effects of cross-species gene transfer in bacteria

14:05 - 14:40 **Project B6**

Evolutionary models for spatially structured tumors

14:40 - 15:00 **Coffee Break**

15:00 - 15:35 **Project B7**

Predicting the constrained evolution of tumors

15:35 - 16:10 **Project B8**

Predicting patterns of adaptation to radio-chemotherapy in cancer

16:10 - 16:30 **Discussion**

Venue: Institute for Biological Physics, Zülpicher 77a, Conference Room S 0.03 Ground Floor