# Modelling Resistance Evolution – Theoretical Methodology Symposium

## Wednesday 26 April 2023

#### Talks: Session 1 - Lecture Hall (10:30-12:30)

time [id] title	presenter
10:30 [1] The importance of persistence for the evolvability of antibiotic resistance	BOCCARELLA, Giorgio
11:00 [2] Mathematical models of collective antibiotic tolerance	LAFONT, Pierre
11:30 [3] Evolution of multidrug resistance from plasmid-mediated heterozygosity	DEWAN, lan
12:00 [4] Memory and Hysteresis in the adaptive evolution of bacterial resistance in environments of varying antibiotic concentration	MUNGAN, Muhittin

#### Talks: Session 2 - Lecture Hall (15:00-16:00)

time [id] title	presenter
15:00 [8] Multi-step Resistance Evolution in Compact Populations	KAYSER, Jona
15:30 [9] What to target in evolving populations - population size, growth or survival?	RAATZ, Michael

## **Thursday 27 April 2023**

### Talks: Session 3 - Lecture Hall (10:30-12:30)

time	[id] title	presenter
	[12] Model-based design of innovative treatment strategies to suppress antimicrobial resistance using collateral sensitivity	AULIN, Linda
	[13] Fitness seascapes reveal heterogeneous mutant selection windows in clinically-relevant pharmacokinetic models	KING, Eshan
11:30	[14] Modeling Stress-Induced Responses in Bacterial and Cancer Therapeutic Resistance	BUKKURI, Anuraag
12:00	[15] Mechanisms of non-genetic resistance to cancer therapy	KAREVA, Irina

## Friday 28 April 2023

#### Talks: Session 4 - Lecture Hall (10:30-12:30)

time	[id] title	presenter
10:30	[17] Competing effects of mutation bias and selection on resistance evolution	KRUG, Joachim
	[18] Learning and predicting the pathways of AMR evolution with hypercubic inference	RENZ, Jessica
11:30	[19] Modeling selection for evolvability in the evolution of cancer therapy resistance	WEH, Malgorzata
12:00	[20] Repeatability of antibiotic resistance evolution for heavy-tailed distributions of fitness effects	DAS, Suman G