# Microbial community ecology: bridging theory and observations

# Wednesday 12 July 2023

## Talks & discussion - Lecture hall - interim building (09:45-10:45)

#### -Conveners: Emil Mallmin

time [id] title	presenter
09:45 [22] From Patterns to Mechanism to Prediction in Microbiome Science	ODWYER, James

# Talks & discussion - Lecture hall - interim building (11:00-12:00)

#### -Conveners: Jules Fraboul

time [id] title	presenter
11:00 [33] Dynamics of high-diversity spatially extended heterogeneous ecosystems	BIROLI, Giulio

### Talks & discussion - Lecture hall - interim building (13:00-14:30)

#### -Conveners: Martina Dal Bello

time	[id] title	presenter
13:00	[40] What I learned from kefir microbiome	PATIL, Kiran Raosaheb
	[30] Describing microbial communities using models of cellular resource allocation	STEUER, Ralf

#### Talks & discussion - Lecture hall - interim building (14:45-15:45)

## -Conveners: Giulia Garcia Lorenzana

time [id] title		presenter
	Profiles – Unraveling the effects of deeply divergent predators on the of microbial communities	KRAMER, Jos
15:15 [18] The ii	nplicit Assumptions of Functional Responses	PALAMARA, Gian Marco

### Talks & discussion - Lecture hall - interim building (20:00-21:00)

#### -Conveners: Silvia De Monte

time [id] title	presenter
20:00 [24] Statistical analysis of ocean microbes	HYUN, Sangwon

# Thursday 13 July 2023

### Talks & discussion - Lecture hall - interim building (09:00-10:30)

#### -Conveners: Giulia Garcia Lorenzana

time	[id] title	presenter
	[34] Generalized Random Lotka-Volterra model: number of equilibria, glassiness, and beyond	ALTIERI, Ada
09:30	[15] Breakdown of Random-Matrix Universality in Persistent Lotka-Volterra Communities	BARON, Joseph
	[16] Local sign stability and its implications for spectra of sparse random graphs and stability of ecosystems	VALIGI, Pietro

### Talks & discussion - Lecture hall - interim building (11:00-12:00)

#### -Conveners: Giulia Garcia Lorenzana

time [id] title	presenter
11:00 [12] Toward predicting and controlling microbial community dynamics	AMOR, Daniel

### Talks & discussion - Lecture hall - interim building (13:00-14:00)

#### -Conveners: Jules Fraboul

time	[id] title	presenter
13:00	[23] Single Biotic Interactions Shape Composition of Microbial Communities but Historical Contingency and Evolution Determine Functionality	SCHEUERL, Thomas
13:30	[6] Improving Collective Function in Microbial Communities through Bias-Driven Selection	PARK, Hyejin

# Talks & discussion - Lecture hall - interim building (14:10-15:10)

#### -Conveners: Silvia De Monte

time [id] title	presenter
14:10 [20] Artificial evolution of artificial plant- and algae-associated bacter communities	erial GARRIDO-OTER, Ruben

# Talks & discussion - Lecture hall - interim building (15:30-19:00)

#### -Conveners: Martina Dal Bello

time	[id] title	presenter
	[11] Exploring the effects of metabolic mutations on cell-cell interactions in spatially structured synthetic microbial communities	RAMESH, Divvya
16:00	[13] Sugar-acid dichotomy in the carbon catabolic preferences of heterotrophic bacteria	GRALKA, Matti

# **Friday 14 July 2023**

# Talks & discussion - Lecture hall - interim building (09:00-10:30)

### -Conveners: Emil Mallmin

time [id] t	itle pi	resenter
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09:00 [41] Bacteria-bacteria interactions between gut-associated Bacteroides strains	FOKT, Hanna
09:55 [31] Mixed strain pathogen populations accelerate the evolution of antibiotic resistance in patients	WHEATLEY, Rachel

# Talks & discussion - Lecture hall - interim building (11:00-12:00)

#### -Conveners: Emil Mallmin

time [id] title	presenter
11:00 [37] Empirical modeling of ecological dynamics	MUNCH, Stephan

# Talks & discussion - Lecture hall - interim building (13:00-14:30)

#### -Conveners: Martina Dal Bello

time	[id] title	presenter
13:00	[38] On the structuring of bacterioplankton seasonal succession and interannual variation	PINHASSI, Jarone
13:55	[10] Nitrogen fixation increases with diazotroph richness in the global ocean	ERIKSSON, Dominic

# Talks & discussion - Lecture hall - interim building (14:45-15:45)

#### -Conveners: Silvia De Monte

time [id] title	presenter
14:45 [35] Illuminating interactions between microbial cells in the wild	WORDEN, Alexandra