

# **Ecology and co-evolution: from models to data and back**

## **Report of Contributions**

Contribution ID: 1

Type: **not specified**

## **Michael Manhart - Tracking lineage diversity at high resolution in adapting bacterial populations**

*Monday, January 11, 2021 1:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 2

Type: **not specified**

## **Claudia Bank - Drug-induced mutational meltdown and its circumvention in theory and experiments**

*Monday, January 11, 2021 2:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 3

Type: **not specified**

## **Jessica Metcalf - The evolution of within-host ecologies: models to data and back**

*Monday, January 11, 2021 2:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 5

Type: **not specified**

## **Richard Neher - Population genetics of rapid adaptation and influenza virus evolution**

*Monday, January 11, 2021 4:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 6

Type: **not specified**

## **Florence Débarre - Can a gene drive spreading over space be stopped?**

*Monday, January 11, 2021 4:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 7

Type: **not specified**

## **Michael Laessig - Intra-host evolution of SARS-Cov-2**

*Monday, January 11, 2021 5:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 8

Type: **not specified**

## **John Barton - Insights into viral evolution from temporal genetic data**

*Monday, January 11, 2021 5:30 PM (30 minutes)*

**Session Classification:** Afternoon



Contribution ID: 9

Type: **not specified**

## Posters

*Tuesday, January 12, 2021 1:30 PM (2 hours)*

**Session Classification:** Afternoon

Contribution ID: **10**

Type: **not specified**

## **Ned Wingreen - Is cross-feeding evolutionarily stable?**

*Tuesday, January 12, 2021 4:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 11

Type: **not specified**

## **Tami Lieberman - Priority effects in the human skin microbiome revealed by tracking within-person evolution**

*Tuesday, January 12, 2021 4:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 12

Type: **not specified**

## **Luis-Miguel Chevin - Demographic and evolutionary responses to stochastic environments**

*Tuesday, January 12, 2021 5:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 13

Type: **not specified**

## **Benjamin Good - Eco-evolutionary feedbacks in the human gut microbiome**

*Tuesday, January 12, 2021 5:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 14

Type: **not specified**

## **Ivana Cvijovic - Evolution at high resolution**

*Tuesday, January 12, 2021 8:30 PM (30 minutes)*

**Session Classification:** Evening

Contribution ID: 15

Type: **not specified**

## **Oskar Hallatschek - Beyond panmixia: Scale-sensitive tradeoff between stability and adaptation**

*Tuesday, January 12, 2021 9:00 PM (30 minutes)*

**Session Classification:** Evening

Contribution ID: 16

Type: **not specified**

## **Edo Kussell - Ecological memory preserves phage resistance mechanisms in bacteria**

*Tuesday, January 12, 2021 9:30 PM (30 minutes)*

**Session Classification:** Evening



Contribution ID: 17

Type: **not specified**

## **Guillaume Martin - Emergence of a simple fitness landscape from integrated phenotypic networks: can we (re)concile long term fitness trajectories and mutant fitness data**

*Wednesday, January 13, 2021 1:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 18

Type: **not specified**

## **Maud Tenaillon - Adaptive introgression from maize has facilitated the establishment of teosinte as a noxious weed in Europe**

*Wednesday, January 13, 2021 2:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 19

Type: **not specified**

## **Guy Bunin - Interaction patterns in high-dimensional ecological communities**

*Wednesday, January 13, 2021 2:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 20

Type: **not specified**

## **Andrea Graham - Dissecting causes of variation in immune defense in silico, in vitro, & in vivo**

*Wednesday, January 13, 2021 4:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 21

Type: **not specified**

## **Sylvain Gandon - Coevolution and competition drive the diversification of CRISPR immunity**

*Wednesday, January 13, 2021 4:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 22

Type: **not specified**

## **Mercedes Pascual - Eco-evolutionary dynamics, hyper-diversity and frequency-dependent selection in a host-parasite system**

*Wednesday, January 13, 2021 5:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 23

Type: **not specified**

## **Armita Nourmohammad - Control of molecular evolution**

*Wednesday, January 13, 2021 5:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 24

Type: **not specified**

## **Matthieu Barbier - Disorder in ecological interactions - from data to models**

*Thursday, January 14, 2021 1:30 PM (30 minutes)*

**Session Classification:** Afternoon



Contribution ID: 25

Type: **not specified**

## **Fernanda Pinheiro - Metabolic fitness landscapes predict the evolution of antibiotic resistance**

*Thursday, January 14, 2021 2:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 26

Type: **not specified**

## **Diana Fusco - The inevitable density-dependent dispersal of viral populations and the emergence of pushed waves**

*Thursday, January 14, 2021 2:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 27

Type: **not specified**

## **Jeff Gore - Building microbial communities from the bottom up**

*Thursday, January 14, 2021 4:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 28

Type: **not specified**

## **Karoline Faust - Emergent behaviour in a three-species human gut community**

*Thursday, January 14, 2021 4:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 29

Type: **not specified**

## **Seppe Kuehn - A sparse mapping from structure to function in microbial communities**

*Thursday, January 14, 2021 5:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: **30**

Type: **not specified**

## **Shenshen Wang - On the role of cross-reactivity in virus-host coevolution**

*Thursday, January 14, 2021 5:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 31

Type: **not specified**

## **Roland Regoes - Insights into the evolution of HIV-1 from a three-year-long passaging experiment**

*Friday, January 15, 2021 1:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 32

Type: **not specified**

## **François Munoz - An eco-evolutionary model integrating long-term demographic dynamics under changing environment**

*Friday, January 15, 2021 2:00 PM (30 minutes)*

**Session Classification:** Afternoon



Contribution ID: 33

Type: **not specified**

## **Lindi Wahl - Change for the better: shifts in mutational biases enhance access to beneficial mutations in *E. coli***

*Friday, January 15, 2021 2:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 34

Type: **not specified**

## **Eugene Shakhnovich - Understanding evolution on multiple scales: from protein physics to population genetics**

*Friday, January 15, 2021 4:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 35

Type: **not specified**

## **Faruck Morcos - Inferred epistasis enhances neutral models of sequence evolution**

*Friday, January 15, 2021 4:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 36

Type: **not specified**

## **Arvind Murugan - Physical constraints on epistasis**

*Friday, January 15, 2021 5:00 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: 37

Type: **not specified**

## **Daniel Fisher - Ecological chaos and evolution of intra-species diversity**

*Friday, January 15, 2021 5:30 PM (30 minutes)*

**Session Classification:** Afternoon

Contribution ID: **38**

Type: **not specified**

## **Introduction**

*Monday, January 11, 2021 1:00 PM (30 minutes)*

**Session Classification:** Afternoon