

16h45 - 18h00 Poster session - Drinks

September 8, 2022

9h00 - 9h30 Breakfast coffee

Session 3 - Fundamental Microbiology (continued) - Chair: Peter Mergaert

9h30 - 9h55 Pedro Oliveira (GM)

Beyond the methylome: the defense landscape of complex microbial communities

9h55 - 10h20 Guillaume Tresset & Amélie Leforestier (LPS)

Physical virology: understanding assembly/disassembly processes in viral life cycles

Pitch Session

10h20 - 10h25 Cédric Midoux (PROSE)

Implementation of a Nanopore metagenomic workflow for time-series of complex microbial communities: MAG catalog and functional annotation

10h25 - 10h30 Stéphanie Bury-Moné (I2BC)

Ribosomal RNA operons define a central functional compartment in the *Streptomyces* chromosome

10h30 - 10h35 Gianni Karlo Aguirre Samboní (MExICo)

Reset Petri Net Unfolding Semantics for Ecosystem Hypergraphs

10h35 - 10h40 Tamara Basta (I2BC)

The hyperthermophilic archaeon *Thermococcus kodakarensis* is resistant to pervasive negative supercoiling activity of DNA gyrase

10h40 - 11h40 Poster session - Coffee | Physics lab visit (FAST, LPS)



Session 4 - Systems Biology and Engineering - Chair: Harold Auradou

11h40 - 12h05 David Vallenet (LABGeM)

From genomes to microbial metabolism

Pitch Session

12h05 - 12h10 Elias Gerges (II)

Caractérisation du rôle de la protéine Lsr2 dans la virulence des morphotypes lisses et rugueux de *Mycobacterium abscessus*

12h10 - 12h15 Romane Junker (MaIAGE)

Construction of ASVs networks to monitor the temporal dynamics of bacterial communities - Application to public datasets on vegetable fermentations

12h15 - 12h20 Shih-Hao Lin (C2N)

Development of non-enzymatic lactic acid sensor with screen-printed porous electrode for non-invasive point-of-care detection

12h20 - 12h25 Catherine Even (LPS)

Microalgae for CO₂ capture

12h25 - 13h55 Lunch time

Session 4 - Systems Biology and Engineering (continued)

13h55 - 14h20 Bruno Le Pioufle (ENS) & Filipa Lopes (LGPM)

Biophysics approaches to study microalgae: from mechanisms to the bioprocess

14h20 - 14h45 Théodore Bouchez (PROSE)

Understanding and harnessing environmental microbiomes for biotechnology

Pitch Session

14h45 - 14h50 Enrico Lorenzetti (LadHyX)

Modelling mechanosensor dynamics in fission yeast

14h50 - 14h55 Christophe Monnet (SayFood)

Biotic interactions between two bacterial species growing at the surface of cheeses

14h55 - 15h00 Magda Teixeira-Nunes (I2BC)

Structural basis for the activation of bacterial ExoY nucleotidyl cyclase exotoxins by free or profilin-bound G-actin and impact of the ternary complexes on actin self-assembly *in vitro*.

15h00 - 16h00 Poster session - Coffee break

Session 5 - Agriculture and Food - Chair: Matthieu Jules

16h00 - 16h25 Françoise Rul (MICALIS)

Plant-based fermented food: new opportunities for the lactic acid bacterium *Streptococcus thermophilus*

16h25 - 16h50 Harold Auradou (FAST)

Bacteria in fluid mechanics

16h50 - 17h15 Denis Faure (I2BC)

Pathogen fitness traits as targets for chemical and biocontrol treatments preventing host colonization

17h15 - 17h20 Closing - Organizing committee - Harold Auradou, Ariane Bize, Philippe Gérard, Eric Raspaud

17h20 - 18h00 Drinks