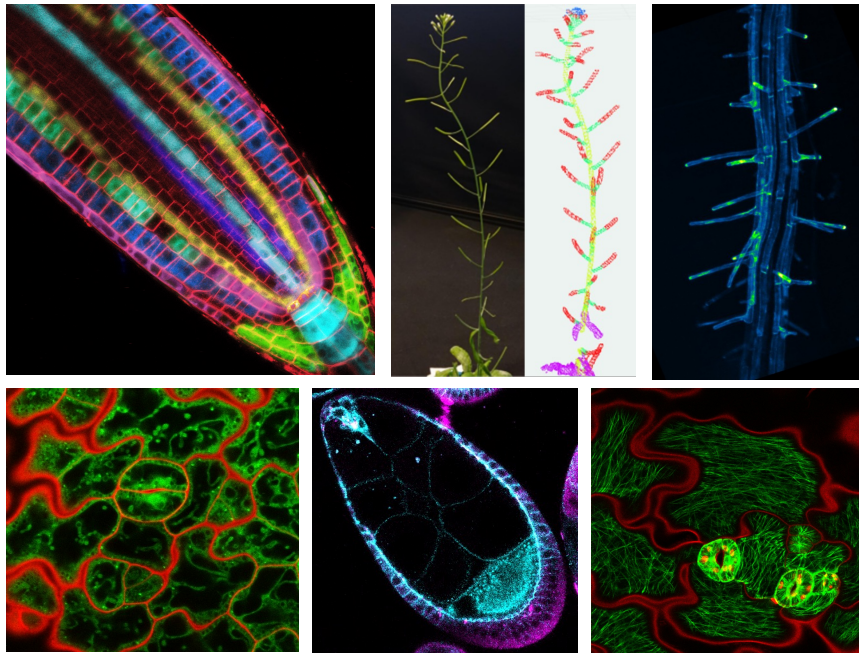


5th LyMiC day

Imaging the plant: challenges and adaptations

22nd of November 2022

Amphitheatre D2, ENS de Lyon, 15 parvis René Descartes Lyon



PLATIM



CICOLE

Centre d'Imagerie
Quantitative Lyon Est



Centre Technologique
des Microstructures



RDP



SFRBIOSCIENCES
Lyon



ENS DE LYON



Lyon 1



idylle



BRUKER



Miltényi Biotec



Nikon



ONiMiC



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Program

9:00 **Introduction:** Lyon Multiscale Imaging Center: Jean-Louis Bessereau, Denis Ressnikoff, Xavier Jaurand, Jacques Brocard, Marine Breuille

OPTOGENETICS

10:00 Keynote: **Matias Zurbriggen** (Synthetic Biology, Düsseldorf)

10:50 **Alice Dufour** (LBMC, Lyon), "Targeted genetic alterations of live cells using light"

11:25 Coffee break

HIGH RESOLUTION IMAGING

11:45 **Giovanni Finazzi** (LPCV, Grenoble), "Phytoplankton bioenergetics investigated at the subcellular scale"

12:20 **Clara Igisch** (RDP, Lyon), "Spatio-temporal regulation of plant Rho GTPase signalling"

12:55 **Jérôme Mutterer** (IBMP, Strasbourg), "Presentation of GDR ImaBio's plant imaging workgroup"

13:05 Lunch

BIOPHYSICS

14:25 **Valentin Laplaud** (LadHyX, Paris), "High-throughput biophysical measurement in *M. polymorpha*: imaging in a microfluidic chip"

15:00 **Audrey Beaussart** (LIEC, Nancy), "Imaging microalgae at the nanoscale: an AFM and confocal study"

15:35 **Muriel Grammont** (LBMC, Lyon), "Probing cell mechanical properties with AFM: from plants to flies"

16:10 Coffee break

IMAGE ANALYSIS AND PHENOTYPING

16:30 **Charles Kervrann** (SERPICO, Rennes), "Challenges of intracellular visualization using virtual and augmented reality: Naviscope project"

17:05 **Peter Hanappe** (Sony CSL, Paris), «Computer vision and machine learning for plant observations, from the lab to the field»

17:40 **Marie-Thérèse Charreyre** (Institut Michel Serres, Lyon), "From fluorescent probe design to environmental challenges"

18:10 Closure