



# HiLight initiative PTL

Exploration of living systems:  
Analysis at high spatial and temporal resolution

This day will feature local and external conferences, as well as a round table to exchange ideas and brainstorm about the HiLight initiative (PTL).

## INVITED SPEAKERS:

Eric Hosy, IINS Bordeaux  
Isabelle Tardieux, IAB Grenoble

## REGISTER HERE

<https://forms.gle/LuMQb7bGXJrktJr87>

In 2026, the sub-theme of the HiLight PTL is **"DEVELOPING MULTIPARAMETRIC APPROACHES"**

**JOIN US ON JANUARY 15, 2026 AT GENOPOLYS!**

# PROGRAM

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9:00-9:15	Introduction <b>Julie Perroy, HiLight PTL Manager</b>
9:15-10:00	<i>Chairperson: Marion Peter, IRCM</i> <b>KEYNOTE - Eric Hosy, IINS Bordeaux</b> New technological improvements for a better understanding of synaptic physiology  <i>Chairperson: Karine Loulier, INM</i>
10:00-10:10	<b>Charlène Boumendil, IGH</b> YRP selected project "Implementing SPEED microscopy and 3D single molecule live-cell imaging to elucidate the role of heterochromatin exclusion at nuclear pores in mRNA export"
10:10-10:20	<b>Fabrice Caudron, IGMM</b> YRP selected project "High resolution live cell imaging of yeast prion-like proteins and RNA assemblies"
10:20-10:30	<b>Emmanuel Perisse, IGF</b> YRP selected project « A virtual olfactory environment to study value-based decision-making in <i>Drosophila</i> »
10:30-10:40	<b>Laurent Le Cam, IRCM</b> CRP selected project "Multiscale/Multimodal Imaging and Digital Twins for Predicting Decision-Making in Colorectal Tumorigenesis"
10:40-11:00	Break  <i>Chairperson: Angelo Torrente, IGF</i>
11:00-11:20	<b>Csilla Gergely, L2C</b> Non-linear optics and AFM-based tissue mechanobiology: label-free insights in neurodegenerative diseases
11:20-11:40	<b>Vivien Szabo, IGF</b> A fiberscope for imaging neural intracellular signalling's dynamics during learning in behaving mice
11:40-12:00	<b>Benoit Charlot, IES</b> Cantilever based microelectrode arrays for the recording of the inner electrical and mechanical activities of organoids
12:00-13:30	Lunch break
13:30-14:15	<i>Chairperson: Raphaël Gaudin, IRIM</i> <b>KEYNOTE - Isabelle Tardieux, IAB Grenoble</b> An innovative combinatorial toolkit to uncover the physics of Toxoplasma motile behaviors  <i>Chairperson: Marie-Pierre Blanchard, MRI</i>
14:15-14:35	<b>Antoine Le Gall, CBS</b> Imaging and Quantifying Emergent Behaviors in Predatory Bacteria
14:35-14:55	<b>Florence Perrin, MMDN</b> Innovative Imaging of Spinal Cord Injury, Aging, and Treatment Dynamics
14:55-15:15	<b>Anne-Blanc Potard, LPHI et Laurence Berry, MRI-EM4Bio</b> Multiple imaging approaches to assess biofilm <i>in vivo</i>
15:15-15:35	Break
15:35-16:30	<i>Chairperson: Pierre-Emmanuel Milhiet, CBS et Raphaël Gaudin, IRIM</i> <b>Round table «Developing multiparametric approaches»</b>
16:30	Closing remarks