

**Thursday 25<sup>th</sup> June 2026 @ 11:00am**

**Ecole Polytechnique @ IPParis**

**Amphi to be announced**

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## **Machine Learning Strategies in Super-Resolution Microscopy to Bridge Technology and Biology**

Super-resolution imaging has revolutionized our ability to get insights in structure, morphology, function, and dynamics of biological and chemical processes. In this talk, I will present novel, multiplexed, techniques that encode more information in a single image and focus on the use of multivariate approaches and machine learning tools to tackle the major challenges that these high-dimensional experiments pose. The developed methodology is showcased in various biological contexts, including for the understanding of mitochondrial dynamics and mechanisms related to neurodegenerative diseases such as Alzheimer's Disease.

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**Renseignements complémentaires / Informations:**

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<https://lob.ip-paris.fr/agenda>