# 26-27-28 June 2019 Angers France
# DEEP LEARNING FOR SPHEROID IMAGING HACKATON - DATA CHALLENGE

**Content:** A short life-long training oriented toward practical aspect of machine learning and specially deep learning programming applied to 3D sphéroïd imaging. Participants (20 max) will work on same samples and submit their solutions to an online data challenge in a community spirit of knowledge sharing. A focus will be made on annotating tools and computing solution to address fast training of deep neural networks.

**Location, date and program:** Angers, Pays de la loire.

**Day 1:** 9H-12H Premodule on sample preparation and acquisition of spheroids.

13H-17H Joint course and hands on machine learning ; 17H-19H Annotating party

**Day 2**: 9H-12H Course on deep learning; 13H-17H Hands on deep learning (denoising, registration segmentation, classification of cells) ; 17H-19H Technoprovider of GPU solutions.

**Day 3:** 8H-16H Launching of Data challenge, First submission of solutions.

**October 2019:** End of Data challenge ; redaction of a collective data paper.

**Invited speakers:** Martin WEIGERT (Dresden University), Diana MATTEUS (Université de Nantes) , Wei OUYANG (Pasteur Institut), Laurent THOMAS (Heildelberg Medical Uni-Acquifer)

**Organizers:** Charlotte RIVIERE (Université Lyon 1), Gaelle RECHER (Institut d'optique, Bordeaux), David ROUSSEAU (Université d'Angers)

**Local team:** Salma SAMIEI, Ali AHMAD, Natalia SAPOUKHINA, Pejman RASTI, Florian BARBAZANGE, Aurélia ROLLAND

**Registration procedure before 26 may 2019:** 400 euros including coffre breaks, lunch, gala dinner, access to GPU programming station, teaching material. **Pre-registration by filling the forme here at : https://docs.google.com/forms/d/1w6rSRKtPFGqtBVvxxT1x4BmvJrtkEcBf7lP13RKyjjM/edit**

Partners