



GLP-ARBRE – Good Laboratory Practices in Molecular Biophysics: a hybrid ARBRE Symposium

Amphitheater Marie Curie – Campus Tech La Doua – 43 bd 11 Novembre 1918 – 69100 Villeurbanne – France

9h00 – 10h00: Onsite registration and posters setup

10h00 – 11h00: Sample quality control, benchmarking & standards – Chair: Josef Houser

Welcome, logistics and a couple of words on ARBRE – Adriana E. Miele (start streaming)

20' – **Lena Bauernhofer** – University of Graz (AT) -
Measuring the cellular copy number and antibody affinity
of an oncoprotein in a native lipid-bilayer environment



10' – **Caroline Mas** – IBS Univ. Grenoble Alpes (F) - Analytical Ultracentrifugation
Sedimentation Velocity for the Characterization of Recombinant Adeno-Associated Virus Vectors

10' – **Sophie Ayciriex** – ISA UCBL (F) - molecular characterization of lipid metabolism by mass spectrometry and multimodal imaging

10' – **Josef Houser** – Masaryk University Brno (CZ) - Benchmarking in biophysics: Insight from the ARBRE society

10' – Q&A

11h00-11h15 – coffee break

11h15 – 12h25: Macromolecular interactions & tools – Chair: Paloma Fernandez-Varela

20' – **Antoine Royant** – ESRF & IBS (F) – Engineering Fluorescent proteins by rational design

20' – **Carlo Travaglini-Allocatelli** – Sapienza University of Rome (I) – Biophysical tools to investigate the structural and dynamic properties of the KH domains of FMRP

10' – **Agnès Hagège** – ISA CNRS (F) - The CE-ICP-MS coupling, a powerful tool for describing protein/metal interactions

10' – **Vincent Chaptal** – MMSB UCBL (F) - Conformational space exploration of cryo-EM structures by variability refinement

10' – Q&A

12h25 – 13h35 – Lunch and poster session



13h35 – 14h25: Technology Alert – Chair: Maggy Hologne

10' – **Marion Albasini** – FidaBio – Working smart with FIDA: rapid characterization of proteins and particles directly in crude matrix

10' – **Dina Nicolaes** – Nicoya – Characterization of Therapeutic Antibodies using Digital SPR

10' – **Amandine Gontier** – Dynamic Biosensors – How to characterize the mode of action and avidity effects of antibodies using switchSENSE® and RT-IC

10' – **Aymeric Audfray** – Malvern – Pushing The Boundaries in Biomolecular Interaction Analysis with the Creoptix WAVEsystem

10' – Q&A

14h25 – 15h25: Lipids, vesicles & membrane proteins – Chair: Patrick England

20' – **Valeria Vetri** – ARBRE & University of Palermo (I) – Sensing peptide-membrane interactions using quantitative fluorescence microscopy

10' – **Loïck Moissonier** – MMSB UCBL (F) - Time-resolved structural transitions of the multidrug transporter BmrA using rapid kinetics and time-resolved cryoEM

10' – **Sabrina Romanò** – Univ Cattolica Sacro Cuore (I) - Biophysical techniques in cancer-derived extracellular vesicles: an FT-IR spectroscopy approach

10' – **Isabel Alves** – CMBN CNRS (F) - Impact of membrane lipid polyunsaturation on dopamine D2 receptor ligand binding and signaling

10' – Q&A

15h25 – 15h35 – Tea break & group photo

15h35 – 17h15 – Poster session

15h35 – 17h15 – ARBRE General Assembly for members – Chair Stefan H. Knauer

17h15 – 17h30 – Closing remarks (end streaming)

