

Scientific & Organizational Committee



S. ENOCH



C. LAVOUTE



P. LECOQ



A. FERREIRA-MARTINS



M. BERNARD



S. BRASSELET



D. MOREL



M. STUBER



C. GUENE



M-E. BELLEMARE



T. CHAIGNE



R. ABDEDDAIM

Marseille Imaging Institute organizes his annual Biomedical Imaging school

Institut d'Etudes Scientifiques in Cargèse, Corsica
From 29th october to 4th November, 2023

This school aims to present the different biomedical imaging modalities :

MR Imaging
X-RAY Imaging
OPTICAL Imaging
ACOUSTIC Imaging
MULTIMODAL Imaging
NUCLEAR MEDICINE Imaging
ARTIFICIAL INTELLIGENCE for Imaging



Different formats and events of the week

INTRODUCTORY COURSES

In each modality, the speakers will introduce the thematic field and then develop aspects of the state of the art and the most recent advances.

THEMATIC COURSES

In each modality, the speakers will focus on advanced technology and/or advanced research.

PUBLIC CONFERENCE

This session will be open to the general public in French language. Pr Eric GUEDJ will speak about "long COVID" and involvement of TEP imaging.

POSTER SESSION

In the exhibition hall, students will have the chance to present their thesis work in poster format in the exhibition hall.

ROUND TABLES

Exchange with experts on two themes.

Theme 1: from an idea to the patient

Theme 2: roles and limitation of AI applications.

EXCURSIONS

An outing to the Calanques de Piana will be organized to discover a UNESCO site.

COCKTAIL PARTY

A social event will be organize on Thursday evening, with delivery of Students Awards.

MRI Imaging



INTRODUCTORY COURSE – TUESDAY 8:45 AM

Matthias STUBER

Motion Suppression in Cardiac MRI.

Head of the CIBM MRI CHUV-UNIL Section

Département de Radiologie Médicale, Lausanne, Switzerland.

University of Lausanne, SWITZERLAND



THEMATIC COURSE – WEDNESDAY 2:45 PM

Andre FERREIRA-MARTINS

Finding in vivo metabolic biomarkers in oncology.

Werner Siemens Imaging Center, University of Tübingen , 72076,
Tubingen, GERMANY.



THEMATIC COURSE – FRIDAY 10:45 AM

Marc DUBOIS

MRI technologies from Ultra High to Ultra Low magnetic fields.

Mulwave Imaging

Marseille, FRANCE.

ARTIFICIAL INTELLIGENCE for medical Image Applications



INTRODUCTORY COURSE – TUESDAY 10:45 AM

Pierrick COUPE

Deep Learning for Quantitative Analysis of Brain MRI.

CNRS Research Director

Univ. Bordeaux - LaBRI UMR 5800

Bordeaux, FRANCE.



THEMATIC COURSE – WEDNESDAY 4:45 PM

Philippe CIUCIU

Deep learning for MR image reconstruction and k-space sampling trajectories.

CEA Fellow, CEA Research Director, Head of the Inria MIND team

CEA/NeuroSpin, Gif-sur-Yvette, FRANCE

Inria MIND team, Paris-Saclay, FRANCE



THEMATIC COURSE – THURSDAY 8:45 AM

Sylvain BAILLET

AI for Neurosciences: Neurosciences for AI.

Montreal Neurological Institute, McGill University

Montreal, CANADA.

OPTICAL Imaging



INTRODUCTORY COURSE – MONDAY 2:45 PM

Amaury BADON

Optical Microscopy & Imaging in the Biomedical Sciences

Bioimaging & Optofluidics Laboratory, Laboratoire Photonique Numérique et Nanosciences (LP2N), Institut d'Optique – Université de Bordeaux, Talence, FRANCE.



THEMATIC COURSE – WEDNESDAY 8:45 AM

Emiliano RONZITTI

Strategies of wavefront shaping to modulate the neural activity

Sorbonne Université, INSERM, CNRS, Institut de la Vision, F-75012 Paris, FRANCE.



THEMATIC COURSE – THURSDAY 2:45 PM

Daniel RAZANSKY

Listening to light and seeing sound for deep tissue imaging and stimulation

University of Zurich
 ETH Zurich
 Zurich, SWITZERLAND

NUCLEAR MEDICINE Imaging



INTRODUCTORY COURSE – MONDAY 8:45 AM

Paul LECOQ

Time-of-Flight PET scanners. Why and How?

CERN, Geneva, SWITZERLAND

Multiwave Metacrystal S.A., Geneva, SWITZERLAND

Instituto de Instrumentación para Imagen Molecular (I3M),
Valencia, SPAIN



THEMATIC COURSE – TUESDAY 2:45 PM

Francis LOIGNON-HOULE

Advances in high-resolution PET imaging.

Institute for Instrumentation in Molecular Imaging, i3M CSIC-UPV

Universitat Politècnica de València

Valencia, SPAIN



THEMATIC COURSE – FRIDAY 8:45 AM

Laura MOLINER

Nuclear Imaging: Gamma and Compton Camera.

Instituto de Instrumentación para la Imagen Molecular,
i3M, CSIC-UPV

Universitat Politècnica de València

Valencia, SPAIN

X-RAY Imaging



INTRODUCTORY COURSE – MONDAY 10:45 AM

Florian SCHAFF

X-ray phase contrast imaging.

Chair of Biomedical Physics, Department of Physics, School of Natural Sciences, Technical University of Munich
Munich School of BioEngineering, Technical University of Munich, Garching, GERMANY



THEMATIC COURSE – TUESDAY 4:45 PM

Salim SI-MOHAMED

Principles and Applications of Spectral CT Imaging.

CREATIS Lab, University of Lyon, INSA-Lyon, Université Claude Bernard Lyon 1, UJM-Saint Etienne, CNRS, Inserm, Lyon, FRANCE
Department of cardiovascular and thoracic imaging, Hôpital Louis Pradel, Hospices civils de Lyon, Bron, FRANCE

ACOUSTIC Imaging



INTRODUCTORY COURSE – MONDAY 4:45 PM

Julien DE ROSNY

Introduction to acoustic imaging

CNRS Research Director, Institut Langevin
Paris, FRANCE



THEMATIC COURSE – WEDNESDAY 10:45 AM

David MARESCA

Biomolecular Ultrasound Imaging

Assistant Professor

Department of Imaging Physics, Delft University of Technology
Delft, THE NETHERLANDS



THEMATIC COURSE – THURSDAY 4:45 PM

Adrien BESSON

E-Scopics: Computerized Ultrasonography for Ultraportable Probes.

E-SCOPICS

Aix-en-Provence, FRANCE

PUBLIC CONFERENCE



THEMATIC COURSE – TUESDAY 6:30 PM

Eric GUEDJ

A propos du COVID long

APHM, Aix Marseille Univ, Ecole Centrale de Marseille, CNRS,
Institut Fresnel UMR 7249, CERIMED, 13005,

Marseille, FRANCE



Institute
Marseille Imaging
Aix-Marseille Université