

The 5th Workshop on Novel Methods of the Brain Imaging in the Clinical and Preclinical Neuroscience (NMBICPN 2023)

## Introduction:

Brain imaging holds crucial roles in viewing normal and abnormal conditions in the human brain without invasive neurosurgery. This workshop invites scientists and clinicians to present their seminal work on the relevant topics in novel methods of brain imaging in clinical and pre-clinical neuroscience.

We welcome investigators to share their innovative brain imaging approaches to further advance our ability to understand our brain function as well as to detect, diagnose, or monitor neurological conditions, such as mental disorders, brain tumor, strokes, epilepsy, Alzheimer's disease, Parkinson's disease, ALS, traumatic brain injury, and other neurological and neuropsychiatric disorders.

We also encourage the presenters to submit the high-quality, original work as a full paper (Type I submission) for the Lecture Notes in Computer Science/Artificial Intelligence (LNCS/LNAI) by Springer-Nature.

We are looking forward to seeing you in Italy in person or virtually!

## **Topics of Interest:**

The topics for the workshop include novel clinical or pre-clinical application of brain imaging with:

- CT, PET, MRI, EEG
- Magneto-encephalography (MEG)
- Diffusion Tensor Imaging (DTI)
- IR, NIRS, event-related optical signal, diffuse optical imaging
- Photoacoustic and Ultrasound
- Neurophotonics
- Voltage- and Calcium imaging

- Any other novel brain imaging techniques
- Application of Virtual Reality, Augmented Reality, or Al/Deep Learning to neuroimaging techniques
- Any advanced or novel software or databases for the brain imaging

Workshop Chairs:

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