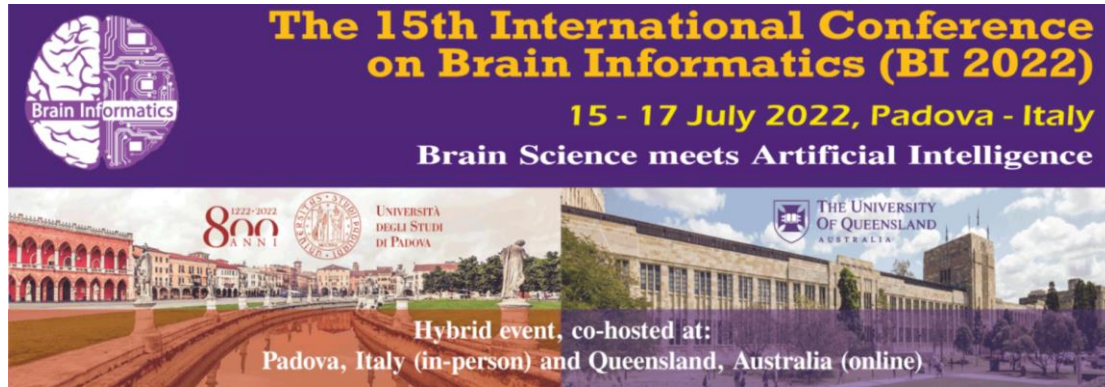




The 4th Workshop on Novel Methods of the Brain Imaging in the Clinical and Preclinical Neuroscience (NMBICPN 2022)

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 AI/Deep Learning to neuroimaging techniques**
- **Any advanced or novel software or databases for the brain imaging**

Workshop Chairs:**Vicky Yamamoto**

USC Norris Comprehensive Cancer Center
Department of Biochemistry and Molecular Medicine
Keck School of Medicine of University of Southern California
California, USA
Email: vicky.yamamoto@usc.edu

Vassiliy Tsytsarev

University of Maryland
Maryland, USA
Email: tsytsarev@umaryland.edu

Length of Workshop

Half-day

Submission and Publication [\[Enter\]](#)

Similar to the main conference, there are 2 types of paper submissions:

- **Type I** : Full Paper Submissions. Papers need to have up to 10 pages in LNCS format using our online submission system. All full-length papers accepted will be published by Springer-Nature as a volume of the series of LNCS/LNAI.
- **Type II** : Abstract Submissions. Abstracts have a word limit of 500 words. Experimental research is particularly welcome. Accepted abstract submissions will be included in the conference program and published as a single, collective proceedings volume.

Workshop and Special Session full papers will be published at the same **BI proceedings at the Springer-Nature LNAI Brain Informatics book series**.

Accepted full papers will be selected to publish in a special issue at the Springer Open Access **Brain Informatics Journal (Springer-Nature)** upon significant revision.

Workshop Schedule

28 February 2022: Paper submission deadline
15 March 2022: Abstract submission deadline
15 April 2022: Paper acceptance notification
20 April 2022: Notification of abstract acceptance
30 April 2022: Final paper and abstract submission deadline
5 May 2022: Accepted paper and abstract registration deadline
15-17 July 2022: Conference