

# The 27th international conference on Information Processing in Medical Imaging (IPMI 2021)

Bornholm, Denmark - June 27th-July 2nd, 2021 https://www.ipmi2021.org

## Call for Papers!

The 27th biennial international conference on Information Processing in Medical Imaging (IPMI 2021) will be held at the island of Bornholm, Denmark from June 27th to July 2nd, 2021. The conference is the latest in a series where novel developments in the acquisition, formation, analysis and display of medical images are presented, discussed, dissected, and extended. Over the last five decades, 26 successful conference editions and the strong community behind it have evolved IPMI to one of the premier conferences in medical image analysis. IPMI places the highest importance on high-quality submissions coupled with presentations and thorough discussions of the presented contributions. IPMI 2021 will continue the scientific focus and traditions established over the last 50 years.

Please see further information at <u>http://www.ipmi2021.org</u> and <u>@ipmi2021</u>. Submission information is available at <u>http://ipmi2021.org/submission/</u>.

## COVID-19 and IPMI

While we sincerely hope that the corona virus pandemic is under control well before IPMI 2021, the current situation requires planning for travel restrictions still being in place, or possibly that the pandemic will prevent a physical conference entirely. We are planning a hybrid meeting with possibility for either physical or online attendance. We expect that the limited number of attendees for IPMI will allow such a format to work well, making for an interesting and enjoyable meeting for both physical and online attendees. We will actively use e.g. discussion groups to facilite interaction given such a format. Should no physical presence be possible, IPMI will be fully virtual. Importantly, in either case, this implies that proceedings with accepted papers will still be published. We continue to monitor the situation as the conference comes closer. Any updates will be published on the website www.ipmi2021.org.

## Cutting edge research in the medical imaging field

IPMI's mission is to facilitate and showcase the latest methodological developments within medical imaging. An "IPMI paper" presents novel methodological developments that solve medical imaging analysis problems. Today, IPMI is widely recognised as a preeminent international forum for presentation of cutting edge research in the medical imaging field including the following topics:

- Image registration, segmentation, acquisition and reconstruction
- Image fusion and synthesis
- Novel deep learning methods for medical imaging

- Statistics for medical imaging
- Computer-aided detection and diagnosis
- Computational anatomy and physiology
- Visualization and physicalization
- Multimodal image processing and analysis
- Functional and molecular imaging
- Imaging and genomics
- Image guided surgery
- Uncertainty estimation
- Interpretability and explainable algorithms
- Loss functions for medical imaging
- Transfer learning, domain adaptation, data harmonization
- Generative modelling
- Learning with noisy or limited data
- Statistical and mathematical models
- Geometric learning, geometric deep learning, geometric statistics
- Shape modeling and analysis

#### Objective

We plan a strong agenda of scientific presentations that will secure the attendance of outstanding researchers from throughout the world in a pleasant and informal setting conducive to in-depth scientific exchange and lively debate.

Our objective in organizing IPMI 2021 is to continue to nurture and encourage contributions from students and junior faculty with the hope that exchanges between the newer and the more established members of the research community will strengthen the scientific program and the field of biomedical image analysis in general.

Proceedings will be published as a volume in the Springer Lecture Notes Computer Science (LNCS) series. Selected papers will be invited to publish extended versions in a special issue in the new free online journal Machine Learning for Biomedical Imaging (MELBA) - http://melba-journal.org.

#### Dates

Paper registration: 1 December 2020, 24:00 AOE Submission of full papers: 8 December 2020, 24:00 AOE Reviews due date: 24 January 2021 Notification of acceptance: Feb. 2021 TBA Camera copy ready: March 2021 (To be announced) Conference: 27 June – 2 July 2021

#### Chairs

Stefan Sommer - University of Copenhagen Aasa Feragen - Technical University of Denmark Julia Schnabel - King's College London Mads Nielsen - University of Copenhagen

