



IEEE/EMBS NER 2023

11th International IEEE EMBS Conference on Neural Engineering
April 25-28, 2023 | Baltimore, MD, USA

CALL FOR PAPERS

IMPORTANT DATES

November 4, 2022

4-page paper submission
deadline

December 19, 2022

4-page acceptance
announcement

January 27, 2023

1-page abstract submission
deadline

February 3, 2023

Final 4-page paper
submission deadline

February 13, 2023

1-page abstract acceptance
announcement

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The 11th International IEEE EMBS Conference on Neural Engineering will be held on April 25-28, 2023.

The Neural Engineering Community welcomes researchers, members of academia, clinicians, representatives of patient associations, industry, government agencies, funders, and other interested parties to attend the premier conference for this highly interdisciplinary field. NER is the world's gathering place for biomedical engineers, neuroscientists, and clinicians to share research and to exchange ideas and breakthrough advances in novel engineering tools for elucidating brain function and neurotechnologies for the restoration and enhancement of impaired sensory, motor, and cognitive functions.

The conference program will feature keynote speakers, invited talks, and poster sessions. All papers will be peer reviewed. All accepted one page and four page papers will appear in the Conference Program. Only four page papers will have the opportunity to be published in *IEEE Xplore*[®].

CONTRIBUTIONS ARE INVITED IN THE FOLLOWING FOUR THEMES, AND ASSOCIATED AREAS

Responsive Neuroengineering

- » Closing the loop in neural prostheses
- » Reinforcement learning in NER
- » Neural modeling
- » Decoding and encoding algorithms
- » Neurorehabilitation

Innovation in High-Resolution Neuroimaging

- » Speckle and coherent optical imaging
- » Novel information extraction from traditional imaging modalities
- » High-sensitivity, small magnetometers
- » AI for image reconstruction, synthesis, and biomarker extraction
- » Multimodal imaging and analysis

The Brain as a Part of a Complex Environment

- » External inputs to the NS
- » Internal inputs to the NS
- » Peripheral nerve inputs to the central NS

Impact in Neuroengineering

- » Pre-clinical work to clinical
- » Clinical trial to HDE
- » IP
- » Neuroethics

AI in
NER

For more information please visit us at 2023.ieee-ner.org