

ABSTRACT BOOK



# 10<sup>th</sup> International BCI Meeting

Sonian Forest,  
Brussels, Belgium



@BciSociety

#BCIMeeting

# Imprint

## Editors

Natalie Mrachacz-Kersting, Jennifer Collinger, Donatella Mattia, Davide Valeriani,  
Mariska Vansteensel, Gernot Müller-Putz

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## 10th International BCI Meeting

### Balancing Innovation and Translation

The International Brain-Computer Interface (BCI) Meeting Series is one of the primary forums for exchanging fundamental information between all subdisciplines in the field of Brain-Computer Interfaces. It is the flagship meeting for the Society of Brain-Computer Interfaces founded on March 13, 2015. Neurologists, neuroscientists, computer scientists, rehabilitation engineers, physicians, therapists, engineers, psychologists, pathologists, ethicists, and actual BCI users are all active participants in the BCI Meeting Series. The 10<sup>th</sup> International BCI meeting will focus on the important and timely topics centered around ***balancing innovation and translation*** in the field of BCI.

Posters and presentations cover research within basic, translational and clinical applications as related to BCIs. The diversity of applications for which BCIs are developed, and the diversity of data and analyses that contribute to progress BCI research, are reflected in the abstracts contained within these Proceedings. It is clear that innovation continues to be a main driving force behind BCI developments, though in recent years the number of BCIs that have been translated to real-world applications has steadily grown. This is exemplified by the numerous clinical trials that have explored the efficacy of BCIs for replacement, restoration and enhancement of function.

We are very excited that this balance between innovation and translation is reflected by our three distinguished colleagues that have accepted our invitation as keynote speakers. Edward Chang, Professor of Neurological Surgery at the University of California, San Francisco, Andrea Kübler, Biologist and Psychologist and Associate Professor at the University of Würzburg and Tomas Oxley, Associate Professor from the University of Melbourne, Australia and founding CEO of Synchron, a brain data transfer company.

On behalf of the BCI Society and the Program Committee for the 2023 BCI meeting, I thank you for your interest in the BCI Meeting and look forward to meeting you at this as well as future installments in the BCI Meeting Series.



Natalie Mrachacz-Kersting, PhD  
University of Freiburg, Germany  
Scientific Program Committee Chair

## **Editors**

Natalie Mrachacz-Kersting, Jennifer Collinger, Donatella Mattia, Davide Valeriani,  
Mariska Vansteensel, Gernot Müller-Putz

## **Lead Reviewer - Category**

Erik Aarnoutse - BCI implant control

Peter Brunner - BCI implant – other

Cuntai Guan - Signal analysis

Gernot Müller-Putz - BCI non-implanted

Donatella Mattia, Davide Valerani, Natalie Mrachacz-Kersting - BCI non-implanted - control

Mariska Vansteensel - User aspects: experience, ethics, target population

Aleksandra Vuckovic - Signal acquisition

## **E-Book preparation**

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