

Zagreb, Croatia, June 3-4, 2022

# 5<sup>th</sup> European Conference of Brain Stimulation in Psychiatry

TMS in Clinical Practice -  
What Works and What Fails?



PRELIMINARY  
**PROGRAMME**

[brain-stimulation2022.com](http://brain-stimulation2022.com)

**08.30 – 09.00***OPENING CEREMONY***09.00 – 10.15***SYMPOSIUM**DEEP –TMS IN CLINICAL PRACTICE: NEW INSIGHTS***CHAIRS**

Igor Filipčić &amp; Abraham Zangen

**ABRAHAM ZANGEN, URI ALYAGON, ARON TENDLER, MARK GEORGE**, Jerusalem, Israel  
Should lateral or Medial prefrontal stimulation be used to treat MDD?**MAAYAN HAREL & MARKUS HEILIG**, Linköping, Sweden

Deep TMS in Alcohol Dependence: A Randomized, Double-Blind, Sham-Controlled Proof-of-Concept Trial with Brain Imaging

**ENA IVEZIĆ & IVANA BAHUN**, Zagreb, Croatia

Effects of deep and r-TMS on neurocognitive functioning in MDD patients

**IGOR FILIPČIĆ & IVONA FILIPČIĆ**, Zagreb, Croatia

Negative symptoms in SCH patients treated with Deep-TMS, H7 coil

**10.15 – 10.30***Q&A***10.30 – 11.15***KEYNOTE SPEAKER***ALBINO OLIVEIRA-MAIA**, Lisbon, Portugal  
rTMS for old-age depression**11.15 – 11.45***COFFEE BREAK***11.45 – 13.00***SYMPOSIUM**LIMITING AND OPTIMISABLE CONDITIONS IN RTMS OF DEPRESSION AND OTHER MENTAL DISEASES***CHAIRS**

Jerome Brunelin &amp; Virginie Moulrier

**MARTIN SCHECKLMANN**, Regensburg, Germany

Influence of TMS, clinical and demographic parameters on the efficacy of rTMS in depression

**MAUD ROTHÄRMEL**, Rouen, France

Deep rTMS: a new option in mental diseases?

**CHRIS BAEKEN**, Ghent, Belgium

Brain perfusion patterns as clinical (non) predictor to aiTBS treatment in medication-resistant depression

**VIRGINIE MOULIER**, Sotteville-lès-Rouen, France

Clinical, cognitive and neurophysiological effects of the combination of neurostimulation techniques in patients with mental disorders

**13.00 – 13.15***Q&A*

13.15 – 14.30

*LUNCH BREAK*

14.30 – 15.45

**HALL 1***SYMPOSIUM**BEYOND CLINICAL SYNDROMES: UNDERSTANDING MECHANISMS OF NEUROMODULATION FROM A DIMENSIONAL PERSPECTIVE***CHAIRS**

Camprodon, Joan A. &amp; Cano, Marta

**ELLARD KRISTEN**, Boston, USA

Changes in Emotion Regulation following Transcranial Magnetic Stimulation (TMS) and the Relationship to Treatment Response in Major Depressive Disorder

**BARBOUR TRACY**, Boston, USA

Differential Effects of Rtms and Ect on the Symptom Dimensions of Reward and approach/avoidance in Major Depressive Disorder

**WARD BENJAMIN**, Boston, USA

Improving Antidepressant Response Prediction Using Dimensional outcomes: Convergent Evidence from ECT and Ketamine Treatments

**DENG ZHI**, Bethesda, USA

Depressive Symptom Dimensions and Response Trajectories in Electroconvulsive Therapy and Magnetic Seizure Therapy

14.30 – 15.45

**HALL 2***SYMPOSIUM**CEREBELLAR NON-INVASIVE BRAIN STIMULATION IN PSYCHIATRIC DISORDERS***CHAIRS**

Roberta Ferrucci, Giordano D'Urso

**RAFFAELE DUBBIOSO**, Naples, Italy

TMS studies of the cerebellar-brain inhibition and neuropsychiatric disorders

**ROBERTA FERRUCCI**, Milano, Italy

Cerebellar tDCS in depression

**RAQUEL GUIOMAR**, Coimbra, Portugal

Cerebellar tDCS in schizophrenia

**GIORDANO D'URSO**, Naples, Italy

Cerebellar tDCS in autism spectrum disorder

15.45 – 16.00

*Q&A*

**CHAIRS**

Stefanie De Smet & Marie-Anne Vanderhasselt

**MARIE-ANNE VANDERHASSELT**, Ghent, Belgium

Combining electrical stimulation and lifestyle interventions targeting the vagus nerve to increase resilience systematic review and meta-analysis

**MAXIMILIAN SCHMAUSSER**, London, United Kingdom

The Effects of Noninvasive Brain Stimulation on Heart Rate and Heart Rate Variability: a systematic review and meta-analysis

**STEFANIE DE SMET**, Leiden, Netherland

Effects of transcutaneous auricular vagus nerve stimulation (taVNS) on autonomic and cognitive rigidity during perseverative cognition

**GIUSEPPE SALVO**,

Reducing disgust and moral rigidity through transcranial direct current stimulation (tDCS): Clinical implications for obsessive-compulsive disorder

**SARA DE WITTE**, Ghent, Belgium

Double-dosed non-invasive brain stimulation: is more better?

**YOUSSEF HUSSEIN**, Egypt

Brain Derived Neurotrophic Factor Negatively Responded to Transcranial Direct Current Stimulation: Randomized Controlled Trial

**ELENA TOSCANO**, Naples, Italy

Long-term home-based fronto-cerebellar transcranial direct current stimulation for autism spectrum disorder: a case series

**ATTALI DAVID**, Paris, France

A 20-Year Journey in Transcranial Ultrasound Stimulation – Lessons Learned

**RAQUEL GUIOMAR**, Coimbra, Portugal

Combining app-based psychological intervention with home-based Transcranial Direct Stimulation for the treatment of depressive and anxiety symptoms: A Case Series

**RADYTÉ EMILÉ**, Oxford, UK

Modelling Non-Invasive Brain Stimulation of Deep Brain Structures for Psychiatric Applications

**08.30 – 09.45****HALL 1***SYMPOSIUM**INNOVATIVE APPLICATIONS OF BRAIN STIMULATION IN PSYCHIATRY:  
NEW TECHNOLOGY TO INCREASE TREATMENT EFFICACY***CHAIRS**

Hanneke Van Dijk &amp; Giordano D'Urso

**ALBERTO PRIORI**, Milano, Italy

Adaptive closed-loop Deep Brain Stimulation in Psychiatry

**ANDRE BRUNONI**, Sao Paulo, Brasil

Digital trials in Brain Stimulation

**DEBBY KLOOSTER**, Eindhoven, Netherlands

The relation between structural brain connections and clinical response to accelerated iTBS

**SAMUEL BULTEAU**, Nantes, France

tDCS+Virtual Reality in fear of heights and rumination

**09.45 – 10.00***Q&A***08.30 – 09.45****HALL 2***SYMPOSIUM**UNDERSTANDING CIRCUIT MECHANISMS OF  
ELECTROCONVULSIVE THERAPY USING MULTIMODAL MRI***CHAIRS**

Camprodon, Joan A. &amp; Barbour, Tracy

**BENJAMIN WADE**, Los Angeles, USA

Differential Changes in Resting-state Functional Connectivity Imparted by Rapidly-acting Antidepressant Treatments

**CARLES SORIANO-MAS**, Barcelona, Spain

Structural covariance between the hippocampus and the insula is associated to ECT response in patients with depression

**MARTA CANO**, Barcelona, Spain

Mechanisms of electroconvulsive therapy (ECT) on anti-suicidal response: a GEMRIC mega-analysis

**JOAN A. CAMPRODON**, Boston, USA

Suicide circuit therapeutics: leveraging the efficacy of ECT and the focality of TMS

**09.45 – 10.00***Q&A***10.00 – 10.45***KEYNOTE SPEAKER***NOLAN WILLIAMS**, Stanford, USA

Stanford Accelerated Intelligent Neuromodulation Therapy

**10.45 – 11.00***COFFEE BREAK*

**CHAIRS**

Chris Baeken & Tik Martin

**PUONTI OULA**, Copenhagen, Denmark

Introduction to electric field modeling: how, why, and what is still missing?

**KLOOSTER DEBBY**, Eindhoven, Netherlands

Do electric field simulations have added value for determining TMS coil positions at the scalp for optimal targeting?

**OPITZ ALEX**, Minneapolis, USA

Meta-analytic electric field modeling

**VASILEIADI MARIA**, Vienna, Austria

High-precision language mapping through multimodal fMRI, TMS and E-field modelling

**CHAIRS**

Martijn Arns & Jonathan Downar

**SHAN SIDDIQI**, Boston, USA

Circuit-targeted TMS across symptoms and disorders

**HELENA VOETTERL**, Maastricht, Netherlands

Facilitating rTMS treatment stratification with Brainmarker 1: A transdiagnostic EEG stratification biomarker

**EVA DIJKSTRA**, Amsterdam, Netherlands

rTMS induced Brain-Heart Coupling: Implications for site selection and frontal thresholding?

**JONATHAN DOWNAR**, Toronto, Canada

Improving clinical outcomes and treatment accessibility for rTMS in depression

**ANDREA ANTAL**, Gottingen, Germany

Transcranial electric stimulation in the the clinical practice – what works and why?

**CHAIRS**

Windischberger Christian & Debby Klooster

**TIK MARTIN**, Stanford, USA

Interslice iTBS/fMRI: Continuous imaging of therapeutic transcranial brain stimulation

**JANSSENS SHANICE**, Maastricht, Netherlands

Simultaneous TMS-EEG-fMRI to study the propagation of TMS throughout the brain

**VAN DIJK HANNEKE**, Nijmegen, Netherlands

Transfer (Deep) Learning based on the raw EEG; Classifying subtypes remitting to various brain-stimulation treatments in MDD

**VINK JORD**, Utrecht, Netherlands

Elucidating propagation patterns of rTMS treatment in depression

**LUECKEL MAXIMILIAN**, Mainz, Germany

Functional connectivity- and E-field-optimized TMS targeting: A pilot TMS-fMRI validation at the single-subject level

**MARIA VASILEIADI**, Vienna, Austria

Emotion processing task as a new strategy for locating individualized TMS targets

**MARCO HIRNSTEIN**, Bergen, Norway

No Evidence for Changes in Prefrontal and Temporo-Parietal Areas by tDCS Treatment of Auditory Hallucinations

**CHRISTOPHE DAUDET**, Anglet, France

Accelerated iTBS rTMS protocol in a clinical routine setting: one year experience

**MARINE MONDINO**, Lyon, France

A case series exploring the effects of high-frequency transcranial random noise stimulation in patients with schizophrenia

**YUKI MIZUTANI-TIEBELAB**, Munich, Germany

Concurrent TMS-fMRI – systematic review of methodological differences and sources of bias