

Hugo Weissbart

POSTDOCTORAL RESEARCHER

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Professional Experience

- 2020-2024 **Postdoctoral Researcher**, Donders Institute, Radboud University, the Netherlands
2020 **Research Assistant**, Imperial College London, UK
2014-2020 **Graduate Teaching Assistant**, Dept. Bioengineering, Imperial College London

Education

Imperial College London

London, United Kingdom

PHD NEUROTECHNOLOGY

2016 - 2020

- Thesis title: Decoding speech comprehension from continuous EEG recordings
- Supervisor: Dr. Tobias Reichenbach

Imperial College London

London, United Kingdom

MRES NEUROTECHNOLOGY

2015 - 2016

- Advisor: Dr. Tobias Reichenbach

Imperial College London

London, United Kingdom

MSc PHYSICS - Distinction

2013 - 2014

- Thesis title: Effects of psilocybin on the human brain functional network
- Advisor: Dr. Tim Evans
- Project grade 79/100

ISAE Supaero

Toulouse, France

ENGINEERING DEGREE

2010 - 2014

- Majors in applied mathematics

Publications

- H Weissbart**, AE Martin. The structure and statistics jointly shape cross-frequency neural dynamics during speech comprehension. 2024. Nature Communications.
- I Zioga, YJ Zhou, **H Weissbart**, AE Martin, S Haegens. Alpha And Beta Oscillations Differentially Support Word Production In A Rule-Switching Task. 2024. eNeuro
- S Slaats, **H Weissbart**, J Schoffelen, AS Meyer, AE Martin. Delta-Band Neural Responses To Individual Words Are Modulated By Sentence Processing, 2023. Journal of Neuroscience
- CW Coopmans, A Mai, S Slaats, **H Weissbart**, AE Martin. What Oscillations Can Do For Syntax Depends On Your Theory Of Structure Building. 2023. Nature Reviews Neuroscience
- F Tezcan, **H Weissbart**, AE Martin, A Tradeoff Between Acoustic And Linguistic Feature Encoding In Spoken Language Comprehension. 2023. Elife
- I Zioga, **H Weissbart**, AG Lewis, S Haegens, AE Martin. Naturalistic Spoken Language Comprehension Is Supported By Alpha And Beta Oscillations. 2023. Journal of Neuroscience
- M Kegler, **H Weissbart**, T Reichenbach. The Neural Response At The Fundamental Frequency Of Speech Is Modulated By Word-Level Acoustic And Linguistic Information. 2022. Frontiers in Neuroscience
- M Wairagkar, MR Lima, D Bazo, R Craig, **H Weissbart**, AC Etoundi, T Reichenbach, P Iyengar, S Vaswani, C James, P Barnaghi, C Melhuish, R Vaidyanathan. Emotive Response To A Hybrid-Face Robot And Translation To Consumer Social Robots. 2021. IEEE Internet of Things Journal
- H Weissbart**, KD Kandylaki, T Reichenbach. Cortical Tracking Of Surprisal During Continuous Speech Comprehension. 2020. Journal of cognitive neuroscience

S Kadir, C Kaza, **H Weissbart**, T Reichenbach. Modulation Of Speech-In-Noise Comprehension Through Transcranial Current Stimulation With The Phase-Shifted Speech Envelope. 2019. IEEE Transactions on Neural Systems and Rehabilitation Engineering

Presentations

INVITED TALKS

April 2024 - *Linear forward models for the analysis of cortical response to naturalistic speech* at the seminar: "Using computational models to bridge between neurobiology, psychology, and linguistic theory". Nijmegen, Netherlands.

January 2020 - *Cortical tracking of linguistic features in continuous EEG*. Invited talk by T. Francart, Leuven, Belgium.

Teaching Experience

- June 2023 **Tutorial on neural time series analysis using linear models**, Invited tutor at Cutting EEG Gardens in Nijmegen
- March 2023 **Time Series Analysis for Cognitive Neuroscience**, for PhD students, Max Planck Institute
- 2016 - 2019 **Electromagnetism**, for Bioengineering undergraduate students, Teaching assistant, Imperial College London
- 2016 - 2019 **Mathematics**, for Bioengineering undergraduate students, Teaching assistant, Imperial College London