

GABRIEL WEINDEL

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ACADEMIC POSITIONS AND GRANTS

- Employment*
- 06/2025 - present **Postdoctoral researcher**, Institut de psychologie,
Université de Lausanne
- 02/2022 - 06/2025 Postdoctoral researcher 0.5 FTE
Advisor: Leendert van Maanen, *Division of Experimental psychology,*
Utrecht University (NL)
- 03/2022 - 03/2025 Postdoctoral researcher 0.5 FTE
Advisor: Jelmer P. Borst & Leendert van Maanen, *Bernoulli Institute*
for Mathematics, Computer Science and Artificial Intelligence, University
of Groningen (NL)
- 04/2021 - 04/2021 Temporary Lecturer, Doctoral school
cognition langage et éducation, Aix-Marseille University (AMU, FR)
- 10/2020 - 12/2020 Research Engineer,
Laboratoire de Neurosciences Cognitives, Centre Nation. de la Recherche
Scientifique (FR)
- 09/2019 - 09/2020 Research and teaching assistant, *Laboratoire de*
Psychologie Cognitive, AMU (FR)
- 10/2016 - 09/2019 Employed doctoral student,
Laboratoire de Psychologie Cognitive, AMU (FR)

Grants

- Postdoctoral Fellowships *Marie Skłodowska-Curie Actions* (2022),
203 k€
- Interdisciplinary PhD grant from *Collège Doctoral* (2016), university wide competition (AMU - *Ministère de l'Enseignement Supérieur et de la Recherche*), 100 k€

SELECTED RESEARCH OUTPUTS

Publications

- Rasanan, A.H.H., Schumacher L., Nunez, M. D., **Weindel, G.** & Rieskamp, J. (2026). Non-decision time-informed collapsing threshold diffusion model: A joint modeling framework with identifiable time-dependent parameters. DOI: [10.7554/eLife.109730.1](https://doi.org/10.7554/eLife.109730.1)
- **Weindel, G.**, Borst, J.P., & van Maanen L. (2025). The locus of decisions in the single-trial electroencephalogram. DOI: [10.7554/eLife.108049.3](https://doi.org/10.7554/eLife.108049.3)
- Boag, R. J., ..., **Weindel, G.**, ..., Brown S. D., & Forstmann, B. U. (2025) An Expert Guide to Planning Experimental Tasks For Evidence-Accumulation Modeling. DOI:[10.1177/251524592513361](https://doi.org/10.1177/251524592513361)
- **Weindel, G.**, van Maanen, L., Borst, J. P. (2024). Trial-by-trial detection of cognitive events in neural time-series. DOI: [10.1162/imag_a00400](https://doi.org/10.1162/imag_a00400)
- **Weindel, G.**, Gajdos, T., Burle, B., & Alario, F.-X. (2022). The Decisive Role of Non-Decision Time for Interpreting the Parameters of Decision Making Models. DOI: [10.17605/OSF.IO/T2AR3](https://doi.org/10.17605/OSF.IO/T2AR3)
- **Weindel, G.**, Anders, R., Alario F.-X. & Burle B. (2021). Assessing model-based inferences in decision making with single-trial response time decomposition. DOI:[10.1037/xge0001010](https://doi.org/10.1037/xge0001010).

Symposia and workshops

- 10/2025 · **Weindel, G.**, Hidden multivariate patterns to locate cognitive events on a by-trial basis. PracticalMEEG *online* (see the [lecture recording](#)).
- 09/2025 · **Weindel, G.** (Initiator) & van Maanen, L. & Borst, J.P., Decision Signal(s) In The Electro-encephalogram. International Conference on Cognitive Neuroscience (ICON) *Porto* (see the [Abstract book](#)).
- 10/2023 · **Weindel, G.** (invited) & Borst, J.P.. Multivariate pattern analysis with hidden semi-Markov models. Cutting Gardens, local conference at *Ghent* workshop (see the associated [Github repository](#)).
- 07/2023 · van Maanen, L., **Weindel, G.** (co-organizer), & Borst, J.P. Symposium: Investigating Within-Trial Timing of Cognitive Processes with EEG. MathPsych/ICCM symposium 2023 conference at *Amsterdam*.
- 07/2023 · **Weindel, G.** (co-organizer), van Maanen, L., & Borst, J.P. Detecting single-trial cognitive events in EEG using hidden semi-Markov pattern analysis and the HMP python package. MathPsych/ICCM workshop, 2023 conference at *Amsterdam* (see the associated [Github repository](#)).
- 04/2021 · **Weindel, G.** (invited) Linear mixed models and Bayesian statistics, Course for AMU doctoral students, *Marseille* (see [associated webpage](#))

Invited talks

- 08/2023 · van Maanen, L., **Weindel, G.**, & Borst, J.P. Windows on Science, Air Force Research Laboratory *Dayton*.
- 10/2022 · **Weindel, G.** The non-decision time in decision-making models, presented at the School of Psychology of Nanjing Normal University *online*. [Recording](#).
- 05/2021 · **Weindel, G.** On the measurement and estimation of cognitive processes with electrophysiological recordings and reaction time modeling. Presented at the Laboratoire de Psychologie et NeuroCognition, *Grenoble*.
- 07/2020 · **Weindel, G.**, Anders, R., Alario, F.-X., & Burle, B.. Assessing model-based inferences in decision making with single-trial response time decomposition. Presented at Virtual MathPsych/ICCM (2020) *online*, [recording](#).

EDUCATION

<i>Ph.D.</i>	<i>10/2016 - 03/2021</i>	Ph.D. in psychology and neuroscience, <i>AMU</i> , PhD thesis. On the measurement and estimation of cognitive processes with electrophysiological recordings and reaction time modeling. <i>Supervisors:</i> F.-Xavier Alario & Boris Burle. See https://thesiscommons.org/342zp/ and the PhD defense recording
<i>M.Sc.</i>	<i>09/2014- 10/2016</i>	Master in cognitive psychology and neuropsychology, with highest honours, <i>AMU</i> 1st year master thesis. Response selection through temporal orienting : an electromyography study. <i>Supervisors:</i> Jenny Coull & Boris Burle. 2nd year master thesis Decision making models : a common formalism to link psychology and neurophysiology. <i>Supervisor:</i> Boris Burle.
<i>Bachelor</i>	<i>09/2011 - 06/2014</i>	Bachelor in psychology, with high honours, <i>AMU</i> 3rd year Bachelor thesis. Spatio-temporal brain dynamics of orthographic, morphological and semantic processing in dyslexic university students: a MEG study. Supervisors: Eddy Cavalli & Pascale Colé.

TEACHING

Selected lectures

Spring 2021 · An introduction to R programming, Course for doctoral students, AMU (4 hours, see [Github repository](#))

Spring 2020 · Mental chronometry and linear mixed models: 1st year master of cognitive science, AMU (11 hours, see [Github repository](#))

Spring 2020 · Education to research and scientific elaboration: 1st and 2nd year Master in cognitive psychology and neuropsychology, AMU (9 hours)

Spring 2020 · Experimental design: 3rd year psychology bachelor, AMU (10 hours, see [Github repository](#))

Fall 2019 · Qualitative and model-based analysis of individual differences: 1st year Master in cognitive psychology and neuropsychology, AMU (9 hours)

Supervision and mentoring

- Supervision of Neuroscience and Cognition MSc theses at Utrecht University (2, 1 co-supervision)
- Supervision of Neuropsychology MSc theses at Utrecht University (2)
- Supervision of AI bachelor theses at Utrecht University (2 co-supervisions)
- Supervision 3rd year AMU Psychology bachelor theses (2)
- Co-Supervision AI MSc theses at the university of Groningen (4 co-supervisions)
- Supervision Neuroscience MSc theses (AMU) (2 co-supervisions)

OTHER INFORMATION

Ad-hoc reviewing

Behavior research methods (1), Cognitive research (1), Communications biology (1), Computational Brain & Behavior (1), Frontiers in Psychology (1), ICCM proceedings (2), Imaging neuroscience (1), Journal of experimental psychology: general (1), Memory & Cognition (1), NeuroImage (1), Neuropsychologia (2), PLOS computational biology (1)

Workshops attended

2019 · Cognitive Control and Performance Monitoring, Oostduinkerke (Belgium)

2018 · MNE-Python workshop at AMU, Marseille (France)

2018 · 4 days Masterclass in Bayesian Statistics at *Centre international de Rencontres Mathématiques*, Marseille (France)

2016 · Bayesian Estimation of Evidence Accumulation Architectures in Neuroscience and Cognition, 5 days summer school by Scott Brown, Andrew Heathcote, Dora Matzke, Brandon Turner at *Boston University*, Boston (MA, USA)

Research skills

Cognitive modeling · Cognitive tasks and experimental design · (General) Linear (mixed) models · Bayesian estimation and statistics · Electro-encephalography · Electro-myography

Computer skills

Python (e.g. numpy, mne, HDDM, pystan, arviz, matplotlib, seaborn, pandas) · L^AT_EX · R · Stan · jupyter notebooks · Brainvision · PsychoPy · Linux · Git · Github · bash · Open office suite · Distant computing (ssh) · Server administration under Debian

Community service

2014-2015 · President of the federation of AMU student's associations, Fédération Aix-Marseille Interasso.

2013-2015 · Elected student member at the Academic council of Aix-Marseille Université ("Commission Formation Vie Universitaire")

2014 · Vice president in charge of higher education and research at the federation of AMU student's associations, Fédération Aix-Marseille Interasso.

2013-2015 · President of the association for psychology students, Psychaid.

2012-2014 · Elected student member at the Psychology council of Aix-Marseille University

2012-2013 · Vice-president in charge of communication at the association for psychology students, Psychaid.

Languages

ENGLISH · Advanced

FRENCH · Native speaker

GERMAN · Native speaker