

1 Personal information

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2 Education

- 11/2022 Venia docendi/Habilitation
cognitive neuroscience (day of exam: 21.11.2022, title of presentation: Virtual reality as a research method in psychology), Faculty of Human Sciences of the University of Bern, Switzerland
- 10/2021-today [CAS Hochschullehre](#)
Zentrum für universitäre Weiterbildung ZUW, University of Bern, Switzerland
- 05/2016 Dr. rer. biol. hum.
Department of Neurology, University Medical Center of the Ludwig - Maximilians - University München (LMU), Germany

3 Employment history

- 08/2024 - today [Associate Professor for Experimental Rehabilitation Science](#)
Faculty of Behavioural Sciences and Psychology, University of Lucerne, Lucerne, Switzerland
- 01/2024 - today [Head of Development: Physiotherapy / Principal Investigator](#)
Neurocenter, Luzerner Kantonsspital (Universitäres Lehr- und Forschungsspital), Lucerne, Switzerland
Research topic: neurorehabilitation, posture and gait analyses
- 10/2018 - 07/2025 [Senior Research Assistant](#) (Advanced Postdoc position with career goal professorship)
Institute of Psychology University of Bern (UniBe), Switzerland
Research topic: perception, spatial cognition, virtual reality, and rehabilitation
- 10/2018 - 09/2019 [Postdoctoral Fellow](#)
Inselspital University Hospital Bern, Switzerland
Research topics: REM sleep behavioral disorder (RBD) and disorders of consciousness (Prof. Dr. Claudio Bassetti)
- 06/2016 - 09/2018 [Postdoctoral Fellow](#)
Department of Neurology, University Medical Center of Munich, Germany
Research topics: Cognitive neuroscience of multisensory integration (Prof. Dr. Marianne Dieterich)
- 03/2013 - 05/2016 [PhD Student](#)
Department of Neurology, University Medical Center of Munich, Germany
Title of thesis: Evaluation des klinischen Nutzens vestibulär evozierter myogener Potentiale (VEMPs) in der Diagnostik von Schwindel- und Gleichgewichtsstörungen (Thesis Committee: Prof. M. Dieterich, Prof. P. Bartenstein, Prof. H. Straka, Prof. D. Huppert, Dr. O. Bayer)

4 Institutional responsibilities

- 08/2024 Member of the "Research Commission" at the University of Lucerne
08/2024 Member of the "Steering Board - Laboratories" at the University of Lucerne

- 11/2022 - today Member of the "Habitations- und Promotionsausschuss" of the Faculty of Human Sciences of the University of Bern
- 10/2021 - 05/2022 Member of the Search Committee for a Professorship in Psychology at the Institute of Psychology of the University of Bern
- 10/2018 - today Member of the Extended Commission of the Technology Platform (TPF) of the Faculty of Human Sciences of the University of Bern

5 Scientific Software Projects & Digital Artifacts

- 2022 - present Main developer for the open source software-package **mpc** written in Julia
[Code](#)
- 2019 - present Project manager and developer for the open source software-package **Platform Commander** written in C and Ruby
[Code](#) [Manual](#) [Videos](#)
- 2022 - present Developer of the open source software-package **pptools** written in Julia
[Code](#)
- 2022 - present Developer of the open source software-package **gabor-patches** written in Julia
[Code](#)
- 2022 Mentoring concept
[PDF](#)
- 2022 Supervision concept for bachelor theses
[PDF](#)
- 2021 Contributor to 3D Models of 6dof Motion. This repository contains a 3d model visualizing motions with 6 degrees of freedom
[Model](#)

6 Teaching activities

- HS2024 **Lecture**
 Lecturer for "Biologische Psychologie", Faculty of Behavioural Sciences and Psychology, [Universität Luzern](#)
- FS2024 **Pro-Seminar**
 Lecturer for "1924-2024: One Hundred Years of Electroencephalography", Neuroscience (Minor), University of Bern (2 hours per week)
- HS2023 **Seminar**
 Lecturer for "Men and machine in the context of rehabilitation" at the Institute of Psychology, University of Bern (2 hours per week)
- HS2023 **Lecture**
 Introduction to Neuroscience in the Master of Advanced Studies (MAS) in [Dance Science](#) at the Institute of Sport Science, University of Bern (2 days)
- HS2022 **Instructor**
 for Research Methods (Wissenschaftliches Arbeiten) at the Institute of Psychology, University of Bern (2 hours per week)
- FS2021 - today **Pro-Seminar**
 Lecturer for "The Neuroscience of Sensory-Motor Interaction", Neuroscience (Minor), University of Bern (2 hours per week)
- FS2019 - today **Seminar**
 Lecturer in the "Forschungsatelier" at the Institute of Psychology, University of Bern (2 hours per week)
- WS2015 - WS2018 **Practical Course**

Lecturer for the Practical Course: “Methods in functional imaging” at the Graduate school for systemic neuroscience of the Ludwig - Maximilians - Universität München (LMU), Germany

WS2017, **Practical Course/Seminar**

WS2018 Lecturer for the Seminar/Practical Course: “Advanced Analysis of Neuropsychological Time Series” at the graduate school for systemic neuroscience of the Ludwig - Maximilians - Universität München (LMU), Germany

SS2015, SS2016 **Practical Course/Seminar**

Lecturer for the Seminar/Practical Course: “Introduction to Electroencephalography (EEG)” at the graduate school for systemic neuroscience of the Ludwig - Maximilians - Universität München (LMU), Germany

SS2013, **Practical Course**

WS2014 Lecturer for the Practical Course: “Methods in clinical neuroscience” at the graduate school for systemic neuroscience of the Ludwig - Maximilians - Universität München (LMU), Germany

Please consult my teaching portfolio for further details regarding my teaching activities: https://matthias-ertl.de/docs/TeachingPortfolio_Matthias_Ertl.pdf
Please find the evaluation reports of my courses on my webpage: <https://matthias-ertl.de/teaching.html>

7 Outreach Activities, Science Communication, Media Coverage

- scheduled 11/2024 Talk at Seniorenuniversität Bern [Schwindel, Sturz und Schlaganfall - \(Un-\)vermeidbare Schicksalsschläge?](#)
- scheduled Talk @ *Seniorenuniversität Luzern*: Motorische und kognitive Neurorehabilitation (Collaboration with PD Dr. Cazzoli)
- 06/2024 Talk at 8x8' "[Junge Forschende erzählen](#)"
- 02/2024 One Lab-Tour (2h) [University Program for people of 65+ years](#) (Seniorenuniversität)
- 10/2023 Two Lab-Tours (total 4h) for the [University Program for people of 65+ years](#) (Seniorenuniversität)
- 09/2023 "Was Hänschen nicht lernt, lernt dann halt Hans", presentation of study results to the participants (cohort 70+ years)
- 06/2023 Talk at 8x8' "[Junge Forschende erzählen](#)"
- 05/2023 "Tierversuche für Technologie" (engl. Animal testing for technology) a public talk at the Chaostreff Bern
- 03/2023 Poster at the [Brainweek Bern](#)
- 06/2022 [Theta waves: A marker of emotional regulation](#). Online article referring to the findings reported in Ertl et al., 2013
- 06/2022 [A marker of emotional regulation](#). Online article referring to the findings reported in Ertl et al., 2013
- 03/2022 "[Der etwas in Vergessenheit geratene Gleichgewichtssinn](#)" (The somewhat forgotten sense for balance). [Podcast Episode](#) des Forschungs Managements der Phil.-hum. Fakultät der Universität Bern
- 08/2023 - today Co-host of the Podcast: [Zukunftswerkstatt - Wege und Ideen ins Morgen](#)

8 Publications

8.1 ARTICLES IN REFEREED JOURNALS

- 2024 Klein A., Aeschlimann, S., Zubler F., Scutelnic, A., Riederer F., **Ertl M.**, Schankin S. Alterations of the alpha rhythm in visual snow syndrome: a potential target for specific treatment. *The Journal of Headache and Pain*
[PDF](#) [preprint](#)
- 2023 Subramaniam A., Eberhard-Moscicka A.K., **Ertl M.**, and Mast F.W. Rocking Devices and the Role of Vestibular Stimulation on Sleep and Cognitive Performance - A Systematic Review. *Clinical and Translational Neuroscience*
[PDF](#)
- 2023 Martarelli C., Chiquet S., **Ertl M.** Keeping track of reality: Embedding visual memory in natural behavior. *Memory*
[PDF](#) [preprint](#)
- 2023 **Ertl M.**, zu Eulenburg P., Woller M., Mayadali Ü., Boegle R., Dieterich M. Vestibular mapping of the naturalistic head-centered motion spectrum. *Journal of Vestibular Research*
[URL](#) [preprint](#)
- 2023 Wyssen G., Morrison M., Korda A., Wimmer W., Otero-Millan J. **Ertl M.**, Szukics A.A., Wyss T., Wagner F., Caversaccio M., Mantokoudis G., Mast F.W. Measuring the Influence of Magnetic Vestibular Stimulation on Reflexive Eye Movements, Self-Motion Perception, and Cognitive Performance in a 7T MRT. *JoVE*
[PDF](#)
- 2023 Fitze D., Mast F.W., **Ertl M.** Vestibular perceptual thresholds - A systematic literature review. *Gait & Posture*
[PDF](#)
- 2022 Ruehl M., Ophhey., Raiser T., Seiderer K., Flanagan V.L., **Ertl M.**, Conrad J., zu Eulenburg P. The human egomotion network. *NeuroImage*
[PDF](#)
- 2022 **Ertl M.**, Wyssen G., Fitze D.C., Mast F.W. Estimating Vestibular Perceptual Thresholds using a Six-Degree-of-Freedom Motion Platform. *JoVE*
[PDF](#)
- 2022 Conrad J., Habs M., Ruehl M., Boegle R., **Ertl M.**, Kirsch V., Eren O., Becker-Bense S., Stephan T., Wollenweber F., Duering M., Dieterich M., zu Eulenburg P. Reorganization of sensory networks after subcortical vestibular infarcts – A longitudinal symptom-related VBM study. *European Journal of Neurology*.
[PDF](#)
- 2022 Conrad J., Habs M., Ruehl M., Boegle R., **Ertl M.**, Kirsch V., Eren O., Becker-Bense S., Stephan T., Wollenweber F., Duering M., zu Eulenburg P., Dieterich M. White matter volume loss drives cortical reshaping after thalamic infarcts. *NeuroImage: Clinical*.
[URL](#)
- 2022 **Ertl M.**, Prelz C., Fitze D., Wyssen G., Mast F.W., PlatformCommander - An open source software for an easy integration of motion platforms in research laboratories. *SoftwareX*.
[PDF](#)
- 2021 Ruehl M., Kimmel R., **Ertl M.**, Conrad J., zu Eulenburg P. In vivo localization of the human velocity storage mechanism and its core cerebellar networks by means of galvanic-vestibular afternystagmus and fMRI. *The Cerebellum*.
[PDF](#)

- 2021 Ruehl M., Ophrey L., **Ertl M.**, zu Eulenburg P. The cingulate oculomotor cortex. Cortex.
[PDF](#)
- 2021 Conrad J., Habs M., Ruehl M., Boegle R., **Ertl M.**, Kirsch V., Eren O., Becker-Bense S., Stephan T., Wollenweber F., Duering M., Dieterich M., zu Eulenburg P. Structural reorganization of the cerebral cortex after vestibulo-cerebellar stroke. NeuroImage Clinical.
[PDF](#)
- 2021 **Ertl M.**, zu Eulenburg P., Woller M., Dieterich M., The role of delta and theta oscillations during ego-motion in healthy adult volunteers. Experimental Brain Research.
[PDF](#)
- 2020 Conrad J., Habs M., Boegle R., **Ertl M.**, Kirsch V., Stefanova-Brostek I., Eren O., Becker-Bense S., Stephan T., Wollenweber F., Duering M., zu Eulenburg P., Dieterich M., Global multisensory reorganization after vestibular brain stem stroke. Ann. Clin. Transl. Neurol. 2020 Aug 28.
[PDF](#)
- 2020 **Ertl M.**, Klaus M., Mast F.W., Brandt T., Dieterich M. EEG Spectral fingerprints of correct stimulus classification in a vestibular intensity discrimination task. NeuroImage 2020 Oct 1.
[PDF](#)
- 2020 Conrad J.*, **Ertl M.***, Oltmanns M.H., zu Eulenburg P. Prediction contribution of the cranial collateral circulation to the clinical and radiological outcome of ischemic stroke. J Neurol. 2020 Mar 23
[PDF](#)
- 2020 **Ertl M.**, Schulte M., Dieterich M. EEG microstate architecture does not change during passive whole-body accelerations. J Neurol. 2020 Mar 23
[PDF](#)
- 2019 **Ertl M.**, Klaus M., Dieterich M., Brandt T., Mast F. Distorted mental spatial representation of multi-level buildings – Humans are biased towards equilateral shapes of height and width. Scientific Reports 2019 9:15046
[PDF](#)
- 2019 **Ertl M.** and Boegle R., Investigating the vestibular system using modern imaging techniques – A review on the available stimulation and imaging methods. The Journal of Neuroscience Methods 2019 Jul 25; 326:108363
[PDF](#)
- 2018 Oh S.-Y., Boegle R., **Ertl M.**, Stephan T., Dieterich M., Multisensory vestibular, vestibular-auditory, and auditory network effects revealed by parametric sound pressure stimulation. Neuroimage 2018 Aug 2;176-363
[URL](#)
- 2018 **Ertl M.**, Klimek M., Boegle R., Stephan T., Dieterich M., Vestibular perception thresholds tested by galvanic vestibular stimulation. Journal of Neurology, 2018 Oct;256(Suppl 1):55-56
[PDF](#)
- 2018 Conrad J., Boegle R., **Ertl M.**, Habs M., Brandt T., Dieterich M., Recovery from spatial hemineglect documented by intra- and transhemispheric functional connectivity changes in vestibular and visual cortex areas. Frontiers in Neurology 2018 Mar 2;9:112
[PDF](#)
- 2018 Oh S.-Y., Shin H.-J., Boegle R., **Ertl M.**, zu Eulenburg P., Kim J.-S., Dieterich M.,

- Simultaneous recording of cervical and ocular vestibular-evoked myogenic potential. *Neurology*
[URL](#)
- 2017 **Ertl M.**, Moser M., Boegle R., Conrad J., zu Eulenburg P., Dieterich M. The cortical spatiotemporal correlate of otolith stimulation: Vestibular evoked potentials by body translations. *NeuroImage* 2017 Jul 15;155:50-59
[URL](#)
- 2017 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M., Magnetic vestibular stimulation influences resting-state fluctuations and induces visual-vestibular biases. *J Neurol.* 2017 Feb 5;127:409-421
[PDF](#)
- 2017 Oh S.-Y., Boegle R., zu Eulenburg P., **Ertl M.**, Kim J.-S., Dieterich M. Longitudinal multi-modal neuroimaging in opsoclonus-myoclonus syndrome. *J Neurol.* 2017 Mar;264(3):512-519
[PDF](#)
- 2017 Oh S.-Y., Boegle R., **Ertl M.**, zu Eulenburg P., Stephan T., Dieterich M., Auditory induced vestibular (otolithic) processing revealed by an independent component analysis: an fMRI parametric analysis. *J. Neurol* 2017 Oct;264(Suppl1)
[PDF](#)
- 2016 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M. Magnetic vestibular stimulation modulates default mode network fluctuations. *NeuroImage*, 2016 Feb. 15; 127:409-21
[URL](#)
- 2016 Bremova T., Caushaj A., **Ertl M.**, Boettcher N., Strupp M., MacNeilage P. R. Comparison of linear motion perception thresholds in vestibular migraine and Menière's disease. *European Archives of Oto-Rhino-Laryngology* 2016 Jan. 4.
[PDF](#)
- 2015 Meyer B., Yuen K., **Ertl M.**, Polomac N., Mulert C., Büchel C., Kalisch R. Neural mechanisms of placebo anxiolysis. *Journal for Neuroscience* 2015 Mai 13; 35(19):7365-73
[PDF](#)
- 2015 **Ertl M.**, Boegle R., Kirsch V., Dieterich M. On the impact of examiners on latencies and amplitudes in cervical and ocular vestibular evoked myogenic potentials evaluated over a large sample (N = 1038). *European Archives of Oto-Rhino-Laryngology* 2015 Jan 28
[PDF](#)
- 2015 **Ertl M.**, Kirsch V., Gerb J., Boegle R., Krafczyk S., Dieterich M. Appraisal of the signal-to-noise-ratio of uni- and bipolar recordings of ocular vestibular evoked myogenic potentials. *Journal of vestibular research* 2015;25(1):9-14
[URL](#)
- 2014 Steinmann S., Leicht G., **Ertl M.**, Andreou C., Polomac N., Westerhausen R., Friederici A.D., Mulert C. Conscious auditory perception related to long-range synchrony of gamma oscillations. *NeuroImage* 2014 Oct 100;
[URL](#)
- 2014 Karch S., Voelker J.M., Thalmaier T., **Ertl M.**, Leicht G., Pogarell O., Mulert C. Deficits during Voluntary Selection in Adult Patients with ADHD: New Insights from Single-Trial Coupling of Simultaneous EEG/fMRI. *Frontiers in Psychiatry* 2014 Apr 22; 5:41
[PDF](#)
- 2013 Leicht G., Troschütz S., Andreou C., Karamatskos E., **Ertl M.**, Naber D., Mulert

- C. Relationship between oscillatory neuronal activity during reward processing and trait impulsivity and sensation seeking. *PLoS One* 2013 Dec 20; 8(12):e83414
[PDF](#)
- 2013 **Ertl M.***, Hildebrandt M.*, Leicht G., Ourina K., Mulert, C. Emotion regulation by cognitive reappraisal - The role of low frequency oscillations. *NeuroImage*, 2013 Nov; p. 412-21
[URL](#)
- 2013 Leicht G., Mulert C, Eser D., Sämann P.G., **Ertl M.**, Laenger A., Karch S., Pogarell O., Meindl T., Czisch M., Rupperecht R. Benzodiazepines Counteract Rostral Anterior cingulate Cortex Activation Induced by Cholecystokinin-Tetrapeptide in Humans. *Biological Psychiatry* 2013 Feb; 73(4): p. 337-44
[URL](#)
- 2012 Jaspers-Fayer F., **Ertl M.**, Leicht G., Leupelt A., Mulert C. Single-trial EEG-fMRI coupling of the emotional auditory early posterior negativity. *NeuroImage* 2012 Sep; 62(3): p. 1807-14
[URL](#)
- 2012 Juckel G., Karch S., Kawohl W., Kirsch V., Jäger L., Leicht G., Lutz J., Stammel A., Pogarell O., **Ertl M.**, Reiser M., Hegerl U., Möller H.J., Mulert C. Age effects on the P300 potential and the corresponding fMRI BOLD-signal. *NeuroImage* 2012 Mai; 60(4): p. 2027-34
[URL](#)
- 2010 Karch S., Feuerecker R., Leicht G., Meindl T., Hantschk I., Kirsch V., **Ertl M.**, Lutz J., Pogarell O., Mulert C. Separating distinct aspects of the voluntary selection between response alternatives: N2- and P3-related BOLD responses. *NeuroImage* 2010. 51(1): p. 256-64
[URL](#)
- 2010 **Ertl M.***, Kirsch V.*, Leicht G., Karch S., Olbrich S., Reiser M., Hegerl U., Pogarell O., Mulert C. Avoiding the ballistocardiogram (BCG) artifact of EEG data acquired simultaneously with fMRI by pulse-triggered presentation of stimuli. *Journal of Neuroscience Methods*, 2010. 186(2): p. 231-41
[URL](#)
- 2008 Mulert C., Seifert C., Leicht G., Kirsch V., **Ertl M.**, Karch S., Moosmann M., Lutz J., Möller H.J., Hegerl U., Pogarell O., Jäger L. Single-trial coupling of EEG and fMRI reveals the involvement of early cingulate cortex activation in effortful decision making. *NeuroImage* 2008. 42(1): p. 158-68
[URL](#)

8.2 ARTICLES SUBMITTED TO REFEREED JOURNALS

- **Ertl M.** & Gurtner L. Human sciences can increase technology acceptance in rehabilitation science: a call for action. Submitted to *Frontiers in Rehabilitation Sciences*
- Aeschlimann S.A., Klein A., Zubler F., Schankin C.J., **Ertl M.** Electroencephalographic Resting-State Microstates are Unstable in Visual Snow Syndrome. Submitted to *European Journal of Neurology*
- Wyssen G., Mast F.W., **Ertl M.** Imagined Head Rotations Facilitate Spatial Memory. Under Revision
[Preprint](#)

9 Conference Posters, Symposia & Invited Talks

- 2024 Steuri R.A., Borer R., Stucki J., Brémovà-Ertl T., Mast F.W., **Ertl M.** Vestibular evoked potentials in patients with persistent postural-perceptual dizziness - preliminary results. Abstract submitted to the Meeting of the Bârány Society, 2024
- 2024 Fitze D.C., **Ertl M.**, Mast F.W., Vestibular perceptual training enhances vestibular perception, posture, and gait in older adults. Abstract submitted to the Meeting of the Bârány Society, 2024
- 2024 Steuri R.A., Borer R., Brémovà-Ertl T, Mast F.W., Ertl. M., Towards understanding the temporal dynamics of vestibular processing in PPPD patients: Preliminary findings. Poster @ Researcher's Night Bern
- 2024 Conrad J., Boegle R., **Ertl M.**, Kirsch V., Modern approaches for Imaging-based research of the vestibular system. Symposium @ DGKN 2024
- 2023 Subramaniam A., Eberhard-Moscicka AK., **Ertl M.** Mast FW. Rocking and Rolling the Brain to Sleep - Vestibular Stimulation and its impact on Sleep. Poster @ Tag der Forschung 2023
- 2023 Schankin C., **Ertl M.**, Klein A., Visual Snow Syndrome. Symposium @ CNB 2023
- 2023 Berther C., Wyssen, G., Müller P., **Ertl M.** Vestibular Stimulation does not modify the body schema. Poster @ CNB 2023
- 2023 Aeschlimann S.A., Klein A., Schankin C., **Ertl M.** The First Microstate Analysis of Resting-State EEG in Visual Snow Syndrome. Poster @ CNB 2023
- 2023 Szukics Ortiz A.A., Klein A., Schankin C. **Ertl M.** Modulating cortical responsiveness by tACS in visual snow syndrome - a case report. Poster @ CNB 2023
- 2023 Subramaniam A., Eberhard-Moscicka AK., **Ertl M.** Mast FW. Rocking and Rolling the Brain to Sleep - Vestibular Stimulation and its impact on Sleep. Poster @ CNB 2023
- 2023 Invited talk (23.08.2023) "Neurology meets Psychology" at the Kantonsspital Luzern.
- 2023 Ulrich O., Banz O., Klein A., Schankin C., **Ertl M.** Developing a novel object recognition task for separating healthy participants from patients with visual snow syndrome. Poster @ ECNP
- 2023 **Ertl M.**, Fitze F., Mast F. Fall prevention through vestibular perceptual learning. Poster @ ECNP
- 2023 McAssey M., Schulte M., Dieterich M.*, **Ertl M.*** Visual-vestibular interaction. Poster @ Researcher's Night Bern
- 2023 Klein A., Scutelnic A., de Beukelaer S., Zubler F., **Ertl M.**, Schankin C. Alterations of the EEG alpha-rhythm as potential biomarker of visual snow syndrome. Abstract submitted to EAN
- 2023 Invited talk (19.01.2023) "Motor Imagery facilitates Spatial Memory" at the Johns Hopkins University, Baltimore.

- 2023 Invited talk (25.01.2023) on "Spatial Memory and Cortical Vestibular Processing" at the Massachusetts Eye and Ear, Harvard Medical School.
- 2022 **Ertl M.** Motor imagery facilitates spatial memory. Abstract selected for short talk @ 17th CNB Annual Meeting 2022
- 2022 Wyssen G., Mast F.W., **Ertl M.** Motor imagery facilitates spatial memory. Poster @ 17th CNB Annual Meeting, 2022
- 2022 Schankin C., Banz O., Ulrich O., Klein A., **Ertl M.** A masked object recognition task as an objective marker for the Visual Snow Syndrome. Poster @ Swiss Federation of Clinical Neuro-Societies ([URL](#))
- 2022 Rihs M., Dall'Olio L., Steuri R., Martarelli C.S., **Ertl M.** Co-Chair and speaker for the Symposium 3.06: Virtual Reality, the Swiss Army Knife for Psychological Research? 17th Conference of the Swiss Psychological Society in Zurich.
- 2022 Schankin C., Klein A., Ulrich O., Banz O., **Ertl M.** Impaired object recognition in visual noise-a potential marker for Visual Snow Syndrome. Poster @ MTIS2022
- 2022 **Ertl M.**, Prelz C., Fitze D.C., Wyssen G., Mast F.W., PlatformCommander - An open source software for an easy integration of motion platforms in research laboratories. Poster @ ZüMüTü 2022 ([URL](#)).
- 2022 Wyssen G., Mast F.W., **Ertl M.** Vestibular information is insufficient for reliably encoding head positions. Poster @ XXXI Bärány Society Meeting
- 2020 Horvath C. M., Brill A.-K., **Ertl M.**, Ott S. R., Impact of a 3% oxygen desaturation threshold compared to 4% on hypopnoea scoring and classification of sleep apnea in a bariatric population. Poster at ERS 2020
- 2019 **Ertl M.**, Klaus M., Dieterich M., Brandt T., Mast F. Distorted mental spatial representation of multi-level buildings – Humans are biased towards equilateral shapes. Poster at the Symposium Vestibular Consciousness & Cognition 2019
- 2019 **Ertl M.**, Klaus M., Dieterich M., Brandt T., Mast F. Distorted mental spatial representation of multi-level buildings – Humans are biased towards equilateral shapes. Talk at SPS 2019
- 2019 **Ertl M.**, Klaus M., Brandt T., Mast F.W., Dieterich M., EEG Theta band phase clustering corresponds to vestibular discrimination of body accelerations. Poster HBM 2019
- 2019 Raiser T., Ruehl R. M., Ophey L., **Ertl M.**, Flanagan V., zu Eulenburg P. Human Area MST – a cortical visual motion, ocular motor, or vestibular module? Poster HBM 2019
- 2019 Ruehl R.M., Ophey L., **Ertl M.**, zu Eulenburg P., Ocular motor characteristics of the human cingulate eye field and the cingulate sulcus visual area. Abstract submitted to DGKN 2019
- 2017 **Ertl M.**, Woller M., Mayadali Ü., Boegle R., zu Eulenburg P., Dieterich M., Direction-independent cortical event-related responses to naturalistic vestibular stimulation. Abstract at HBM 2017
- 2015 **Ertl M.**, Moser M., Boegle R., Conrad J., Dieterich M., On the impact of acceleration intensity on vestibular evoked potentials (VestEPs) elicited by passive body movements. Abstract at the Conference Joint Meeting of ECNS, ISNIP and ISBET 2015
- 2015 **Ertl M.**, Moser M., Boegle R., Conrad J., Dieterich M., On the impact of stimulus intensity on vestibular evoked potentials (VestEPs). Abstract at ECCN 2015
- 2015 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M., Magnetic Vestibular Stimulation (MVS) influences fMRI resting-state fluctuations – The modulation of the default-mode network as an exemplary case. Abstract at HBM 2015
- 2015 **Ertl M.**, Moser M., MacNeilage, Dieterich M., Neural correlates of otolith

- stimulation: results of an EEG. Abstract at HBM 2015
- 2015 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M., Magnetic vestibular stimulation (MVS) influences fMRI resting-state fluctuations - The modulation of the default-mode network as an exemplary case. Abstract at ISMRM 2015
- 2015 **Ertl M.**, Moser M., Dieterich M., Neural correlates of otolith stimulation: results of an EEG. Talk at DGKN, 2015
- 2015 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M., Magnetic Vestibular Stimulation (MVS) influences fMRI resting-state fluctuations – The modulation of the default-mode network as an exemplary case. Abstract at DGKN, 2015
- 2014 Boegle R., Stephan T., **Ertl M.**, Glasauer S., Dieterich M., Magnetic Vestibular Stimulation (MVS) influences fMRI resting-state fluctuations – The modulation of the default-mode network as an exemplary case. Poster at the symposium of the graduate school for systemic neuroscience, 2014
- 2014 Kirsch V., **Ertl M.**, Krafczyk S., Dieterich M. Neuronal correlates of passive body rotation – an EEG study. Poster at HBM 2014
- 2014 Jaspers-Fayer F., **Ertl M.**, Polomac N., Leicht G., Mulert C., Event-related potentials and oscillatory activity during the cognitive reappraisal of angry faces. Poster at HBM 2014
- 2014 Vauth S., Leicht G., Andreou C., Rauh J., Mußmann M., Polomac N., **Ertl M.**, Karow A., Lambert M., Mulert C. Simultaneous assessment of EEG gamma oscillations and fMRI in the prodromal phase of schizophrenia. Poster at HBM 2014
- 2014 Leicht G., Troschütz S., Andreou C., Karamatskos E., **Ertl M.**, Naber D., Mulert C. Oscillatory neuronal activity during reward processing: relationship to personality traits. Poster at HBM 2014
- 2014 Leicht G., Mulert C., Eser D., Sämann P., **Ertl M.**, Laenger A., Karch S., Pogarell O., Meindl T., Czisch M., Rupprecht R. Effects of benzodiazepines on anterior cingulate cortex activity during experimentally induced panic. Poster at HBM 2014
- 2014 **Ertl M.**, Kirsch V., Gerb J., Krafczyk S., Dieterich M. Appraisal of the signal-to-noise-ratio of uni- and bipolar recordings of ocular vestibular evoked myogenic potentials. Poster at ICCN, 2014
- 2014 Kirsch V., **Ertl M.**, Krafczyk S., Dieterich M. Neuronal correlates of passive body rotation – an EEG study. Poster at DGKN, 2014
- 2013 **Ertl M.**, Hildebrandt M., Ourina K., Leicht G., Mulert C. Emotion Regulation – The role of low frequency oscillations. Poster at HBM 2013
- 2013 Jaspers-Fayer F., Barrie J. **Ertl M.**, Liotti M. An ERP study of task-relevant and –irrelevant emotion in participants with symptoms of depression. Poster at HBM 2013
- 2012 Steinmann S., Leicht G., **Ertl M.**, Mulert C. Long-range synchrony of gamma oscillations between homologous auditory areas during dichotic listening. An EEG and LORETA study. Poster at DGPPN, 2012
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