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Leibniz Research Centre for Working Environment and Human Factors
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EDUCATION

Ruhr Universität Bochum (Germany)	10/2016 – 08/2020
International Graduate School of Neuroscience (IGSN)	
<i>PhD in Neuroscience (summa cum laude)</i>	
Dissertation: "Attentional Orienting in Perceptual and Mnemonic Space: Investigating Electrophysiological Correlates of Selective Auditory Attention"	
Advisors: Prof. Dr. Wascher, Dr. Christian Klaes	
External referee: Dr. Clayton Hickey	
Albert-Ludwigs-Universität Freiburg (Germany)	10/2014 – 09/2016
M.Sc. Clinical Psychology, Rehabilitation and Neuroscience	
Grade: 1.1 on a grading scale from 1.0 ("excellent") to 5.0 ("failed")	
Thesis: "Does psychological flexibility mediate the effectiveness of an internet- based Acceptance and Commitment Therapy for chronic pain? An investigation of change processes."	
Advisors: Prof. Dr. Bengel, Dr. Jiaxi Lin	
Ruhr Universität Bochum (Germany)	10/2011 – 09/2014
B.Sc. Psychology, Major: Cognitive Neuroscience	
Grade: 1.2 on a grading scale from 1.0 ("excellent") to 5.0 ("failed")	
Thesis: "Cross-modal Plasticity: The Impact of a Visual Training on Tactile Orientation Discrimination"	
Advisors: PD Dr. Dinse, Prof. Dr. Suchan	
Lone Peak High School (Alpine, Utah, USA)	08/2008 – 06/2009
International High School Exchange Program	

EMPLOYMENT

Leibniz Research Centre for Working Environment and Human Factors	08/2020 - present
<i>Postdoctoral Fellow</i>	
Department of Ergonomics	
Head: Prof. Dr. Wascher, Advisors: PD Dr. Daniel Schneider, PD Dr. Stephan Getzmann	
Leibniz Research Centre for Working Environment and Human Factors	10/2016 – 07/2020
<i>Research Associate (PhD candidate)</i>	
Department of Ergonomics	
Head: Prof. Dr. Wascher, Advisors: PD Dr. Daniel Schneider, PD Dr. Stephan Getzmann	
Albert Ludwig University of Freiburg	06/2015 – 10/2016
<i>Research Assistant</i>	
Department of Rehabilitation Psychology and Psychotherapy	
Head: Prof. Dr. Dr. Bengel	

PUBLICATIONS

Total: 14, First-author: 6, Co-author: 8, h-index: 7

[Google Scholar](https://scholar.google.com/citations?user=3oBSpXMAAAAJ&hl=en): <https://scholar.google.com/citations?user=3oBSpXMAAAAJ&hl=en>

[ORCID](https://orcid.org/0000-0002-5682-5824): <https://orcid.org/0000-0002-5682-5824>

* denotes that authors contributed equally to the work

1. **Klatt L I**, Begau A, Schneider D, Wascher E, Getzmann S (under review). Cross-modal interactions in behavior, ERPs, and neural oscillations at the audiovisual cocktail-party. *Neuroimage*. Preprint DOI: [10.1101/2022.09.30.510236](https://doi.org/10.1101/2022.09.30.510236)
2. Begau A, Arnau S, **Klatt L I**, Wascher E, Getzmann S (2022). Using visual speech at the cocktail-party: CNV evidence for early speech extraction in younger and older adults. *Hearing Research*, 426, 108636. DOI: [10.1016/j.heares.2022.108636](https://doi.org/10.1016/j.heares.2022.108636)
3. **Klatt L I**, Getzmann S, Schneider D (2022). Attentional Modulations of Alpha Power Are Sensitive to the Task-relevance of Auditory Spatial Information. *Cortex*, 153, 1–20. DOI: [10.1016/j.cortex.2022.03.022](https://doi.org/10.1016/j.cortex.2022.03.022)
4. Begau A, **Klatt L I**, Schneider D, Wascher E., & Getzmann S (2022). The role of informational content of visual speech in an audiovisual cocktail party: Evidence from cortical oscillations in young and old participants. *The European Journal of Neuroscience*, 56, 8, 5215–5234. DOI: [10.1111/ejn.15811](https://doi.org/10.1111/ejn.15811)
5. Rösner M, Sabo M, **Klatt L I**, Wascher E, & Schneider D (2022). Preparing for the unknown: How working memory provides a link between perception and anticipated action. *NeuroImage*, 260, 119466. DOI: [10.1016/j.neuroimage.2022.119466](https://doi.org/10.1016/j.neuroimage.2022.119466)
6. Schneider D, Herbst S*, **Klatt L I***, Wöstmann M. (2021). Target Enhancement or Distractor Suppression? Functionally Distinct Alpha Oscillations form the Basis of Attention. *European Journal of Neuroscience*, 55, 11-12, 3256–3265. DOI: [10.1111/ejn.15309](https://doi.org/10.1111/ejn.15309)
7. Begau A, **Klatt L I**, Wascher E, Schneider D, Getzmann S (2021). Do congruent lip movements facilitate speech processing in a dynamic audiovisual multi-talker scenario? An ERP study with older and younger adults. *Behavioral Brain Research*, 412, 113436. DOI: [10.1016/j.bbr.2021.113436](https://doi.org/10.1016/j.bbr.2021.113436)
8. **Klatt L I**, Getzmann S, Begau A, & Schneider D (2020). A dual mechanism underlying retroactive shifts of auditory spatial attention: dissociating target-and distractor-related modulations of alpha lateralization. *Scientific Reports*, 10, 13860. DOI: [10.1016/j.bbr.2021.113436](https://doi.org/10.1016/j.bbr.2021.113436)
9. Getzmann S, **Klatt L I**, Schneider, D, Begau A, & Wascher E (2020). EEG correlates of spatial shifts of attention in a dynamic multi-talker speech perception scenario in younger and older adults. *Hearing Research*, 398, 108077. DOI: [10.1016/j.heares.2020.108077](https://doi.org/10.1016/j.heares.2020.108077)

10. **Klatt L I**, Schneider D, Schubert A, Hanenberg C, Lewald J, Wascher E, & Getzmann S. (2020). Unraveling the relation between EEG-correlates of attentional orienting and sound localization performance: a diffusion model approach. *Journal of Cognitive Neuroscience*, 32, 5, 945-962. DOI: [10.1162/jocn_a_01525](https://doi.org/10.1162/jocn_a_01525)
11. **Klatt L I**, Getzmann S, Wascher E, Schneider D (2018). The contribution of selective spatial attention to sound detection and sound localization: Evidence from event-related potentials and lateralized alpha oscillations. *Biological Psychology*, 138, 133-145. DOI: [10.1016/j.biopsycho.2018.08.019](https://doi.org/10.1016/j.biopsycho.2018.08.019)
12. **Klatt L I**, Getzmann S, Wascher E, Schneider D (2018). Searching for auditory targets in external space and in working memory: Electrophysiological mechanisms underlying perceptual and retroactive spatial attention. *Behavioral Brain Research*, 353, 98-107. DOI: [10.1016/j.bbr.2018.06.022](https://doi.org/10.1016/j.bbr.2018.06.022)
13. Göddertz, A, **Klatt L I**, Mertes C, Schneider D (2018). Retroactive Attentional Shifts Predict Performance in a Working Memory Task: Evidence by Lateralized EEG Patterns. *Frontiers in Human Neuroscience*, 12, 428. DOI: [10.3389/fnhum.2018.00428](https://doi.org/10.3389/fnhum.2018.00428)
14. Lin J, **Klatt L I**, McCracken L, Baumeister H (2018). Psychological flexibility mediates the effect of an online-based acceptance and commitment therapy for chronic pain: An investigation of change processes. *Pain*, 159, 663-672. DOI: [10.1097/j.pain.0000000000001134](https://doi.org/10.1097/j.pain.0000000000001134)

PRE-REGISTRATIONS AND PUBLIC DATASETS

OSF Profile: osf.io/r78m6

- Arslan, C, Schneider D, Getzmann S, Klatt, L I (2022). How is multisensory information encoded and maintained in working memory? Pre-registration: <https://osf.io/c5vjh/>
- Klatt L I, Begau A, Schneider D, Getzmann S (2021). Allocating spatial attention in multisensory environments: an ERP study. Pre-registration: <https://osf.io/vh38g/>; Data and Code: <https://osf.io/asx5v/>
- Klatt L I, Getzmann S, Schneider D (2022). Attentional Modulations of Alpha Power Are Sensitive to the Task-relevance of Auditory Spatial Information. Data, Stimuli, and Code: <https://osf.io/a8f6y/>

INVITED TALKS

1. Beyond vision and toward a multisensory perspective of working memory, ESCOP Symposium "Recent developments linked to the focus of attention in working memory", Lille, France, 08/2022 – *invited by Caro Hautekiet*

2. "Attentional orienting in complex auditory scenes: the spatial specificity of alpha-band oscillations", University of Birmingham, Neuronal Oscillations Research Group, 03/2021, talk given online – *invited by Prof. Ole Jensen*
3. "Attending to Auditory Working Memory Representations: Target Facilitation or Distractor Suppression?" 59th Society for Psychophysiological Research (SPR) Annual Meeting, Washington DC., USA, 09/2019. – *selected from all poster submissions for the Faces of the Future Symposium*

CONFERENCE TALKS *only first-author presentations

1. **Klatt L I**, Getzmann S, Schneider D (2021). Attentional Modulations of Alpha Power Are Sensitive to the Task-relevance of Auditory Spatial Information. Tagung experimentell arbeitender Psychologen (TeaP) Virtual Conference, 14.03.-17.03.2021.
2. **Klatt L I**, Getzmann S, Begau A, Schneider D (2020). Distractor Inhibition or target prioritization? Unraveling the mechanisms underlying the orienting of attention within working memory. Virtual Working Memory Symposium (VWMS), Hosts: Edward Ester (Florida Atlantic University) & Jarrod Lewis-Peacock (University of Texas at Austin), 01.06. - 04.06.2020.
3. **Klatt L I**, Getzmann S, Begau A, Schneider D (2019). Attentional orienting within auditory working memory: Target enhancement or distractor inhibition? 45. Jahrestagung Psychologie und Gehirn (PuG), Dresden, Germany, 20.06.-22.06.2019.

POSTER PRESENTATIONS *only first-author presentations

1. **Klatt L I**, Begau A, Schneider D, Getzmann S (2022). Allocation spatial attention in an audio-visual cocktail-party environment: evidence from ERPs and neural oscillations. International Conference of Cognitive Neuroscience 2020 (ICON), Helsinki, Finland, 05.18. – 05.23.22.
2. **Klatt L I**, Begau A, Schneider D, Getzmann S (2022). EEG measures of spatial attentional orienting in multisensory environments. Tagung experimentell arbeitender Psycholog:innen (virtual conference), 03.20. –03.23.2022.
3. **Klatt L I**, Begau A, Schneider D, Getzmann, S (2021). Allocating spatial attention in multisensory environments: an ERP study. 46. Tagung Psychologie und Gehirn, Tübingen (virtual conference), 06.02. –06.04.2021.
4. **Klatt L I**, Getzmann S, Schneider D (2020). Attentional Modulations of Posterior Alpha Power in Sound Localization: The Role of Spatial Information. [UNSW Workshop on Expectation, Perception and Cognition 2020](#), UNSW Sydney, Australia (virtual conference), 10.01. - 10.02.2020.
5. **Klatt L I**, Getzmann S, Schneider D (2020). The Timing of Attentional Alpha Power Modulations Predicts Sound Localization Performance in Complex Auditory Scenes. Cognitive Neuroscience Society 2020 Virtual Meeting, 05.02. - 05.05.2020.

6. **Klatt L I**, Getzmann S, Wascher E, Schneider D (2018). Selective processing of auditory spatial information: EEG correlates of spatial attention in perception and working memory. EPOS/Helmholtz Winter School: Symposium on Inhibition, Amsterdam, Netherlands, 12.05. –12.07.2018.
7. **Klatt L I**, Getzmann S, Wascher E, Schneider D (2018). Neural correlates of perceptual and retroactive spatial attention in feature-based and spatially specific auditory search: insights from lateralized alpha band oscillations. 44. Tagung Psychologie und Gehirn, Gießen, Germany, 05.31. -06.02.2018.
8. **Klatt L I**, Getzmann S, Schneider D (2018). Shifting auditory attention in perceptual and mnemonic space: an investigation of event-related EEG parameters in a sound localization and sound detection paradigm. 25th Annual Meeting Cognitive Neuroscience Society (CNS), Boston, Massachusetts, 03.24. - 03.27.2018.
9. **Klatt, L I**, Getzmann S, Schneider D (2017). Sound localization versus detection within auditory working memory and perception: evidence from lateralized alpha oscillations. First Munich Symposium on Visual Working Memory, Munich, Germany, 07.27. – 07.29.2017.
10. **Klatt L I**, Getzmann S, Schneider D, Wascher E (2017). Electrophysiological correlates of attentional selection within auditory working memory and perception. 43. Tagung Psychologie und Gehirn, Trier, Germany, 06.15. - 06.17.2017.

TEACHING

Practical course neuropsychological methods: EEG and Seminar course neuropsychological methods: EEG (M.Sc. Cognitive Science, Ruhr Universität Bochum)	Summer semester 2019-present
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- Course consists of two weekend seminars, aimed at teaching students how to collect and pre-process EEG-data and conduct basic ERP-analyses.
- In 2020 (fully asynchronous) and 2021 (synchronous and asynchronous elements) the course took place online course (due to COVID-19 pandemic).

EEG Preprocessing Crash course at Neuroergonomics Conference (in cooperation with Dr. Julian Reiser)	09/2021
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MENTORING

¹co-supervision, ²primary advisor, ³internship instructor

Arslan Gabdulkhakov (Ruhr University Bochum, PhD thesis, 02/2023 – present)¹

Ceren Arslan (Ruhr University Bochum, PhD thesis, 04/2022 – present)²

Alexandra Begau (Ruhr University Bochum, PhD thesis, 01/2021 – 12/2022)¹

Arslan Gabdulkhakov (Ruhr University Bochum, Master thesis, 01/2021 – 03/2022)²

Kimberly Freytag (Ruhr University Bochum, internship + Bachelor thesis, 08/2018 – 08/2019)^{2,3}

REVIEWING – JOURNALS *in alphabetical order

Acta Psychologia	Memory & Cognition
Biological Psychology	NeuroImage
eNeuro	Neuropsychologia
Frontiers Human Neuroscience	Psychophysiology
International Journal of Psychophysiology	Scientific Reports
Journal of Cognitive Psychology	Quarterly Journal of Experimental Psychology

SERVICE

Co-organizer for the Working Memory Symposium	03/2023 - present
Organizer for the Colloquium Talk Series „ Neurocognition and Work “ (talks are given online or in hybrid format)	01/2021 - present
Appointment Committee for the Professorship „Neuroscience and Differential Psychology“ at University Dortmund	2022
PuG Poster Prize Committee (Annual Psychology and Brain Meeting)	06/2022
Co-Organizer for the virtual talk series “ Applied Perspectives on the future of work ”	08/2021 – 10/2021
Reviewer for RUB Research School Peer-Review of funding applications by doctoral students	2017 – 2019

SCIENCE COMMUNICATION

Psychology course students from <i>Westfalen-Kolleg Dortmund</i> visit the Leibniz Research Centre for Working Environment and Human Factors - Introductory talk on EEG research and lab tour	03/2023
Letters to a Pre-Scientist - Snail mail exchange between STEM-scientists and tenth grade students in US low-income communities	2021 / 2022
Curator for Real Scientist DE on Twitter	12/13 – 21/19/2021
Submission to “KlarText” competition, Klaus Tschira Foundation - Annual science communication competition - Popular scientific journal article on the topic of my PhD thesis, published here	2021
Book a Scientist, Leibniz Gemeinschaft - Speed dating event organized by the Leibniz Society - 15-minute one-on-one Zoom meetings with a scientist	08/2020
High school students from <i>Geschwister-Scholl-Gymnasium</i> visit the Leibniz Research Centre for Working Environment and Human Factors - Introductory talk on EEG research and lab tour	04/2019

High school students from *Gymnasium Herne* visit the Leibniz Research Centre for Working Environment and Human Factors
- Introductory talk on EEG research and lab tour

06/2018

ATTENDED WORKSHOPS AND ADVANCED TRAINING

- **M³ Mentoring program** for career development for female early-career researchers with University Alliance Ruhr, 10/2021 – present
- Analyzing Neural Time Series Data, Dr. Mike X Cohen
Radboud Summer School, Nijmegen, 08.05. –08.09.2019
- Theory and Practice: Multivariate pattern analyses (MVPA) in EEG/MEG: Basics and Application using the ADAM toolbox, Johannes Fahrenfort, Ph.D.
Universiteit van Amsterdam, 10.15. –10.16.2018
- SPM 2018: 21. Introductory course in functional MR imaging
University clinic Hamburg Eppendorf, SPM Programming, Batchmode, VBM, and Resting State Analysis, DTI, 09.04. – 09.07.2018
- Experiment design with OpenSesame and EEG/MEG data analysis with Python, instructors: Dr. Jona Sassenhagen & dr. S. Sebastiaan Mathot, Universiteit van Amsterdam, 15.06.2018

PROFESSIONAL AFFILIATIONS

- German Psychological Society (Deutsche Gesellschaft für Psychologie, DGPs)
- DGPs Interest Group for Open and Reproducible Science (IGOR)
- German Society for Psychophysiology and its Application (Deutsche Gesellschaft für Psychophysiology und ihre Anwendung, DGPA)
- European Society for Cognitive Psychology (ESCOP)
- Scientific Network on Neurocognitive Psychometrics (DFG-funded scientific network, cooperation partners: University Heidelberg, University Mainz, University Zürich, University of Cambridge, University Eichstätt-Ingolstadt, UniDistance Suisse, Université de Genève)
- Scottish-EU-Critical-Oscillations-Network ([SCONe](#))

SOCIAL COMMUNITY SERVICES

Voluntary work for [Experiment eV](#)

2009 - present

- Annual service on committees for a full scholarship for a US-high-school exchange program („Parlamentarisches Patenschafts-Programm“, funded by the German Bundestag and the US-Congress)
- Individual and group interviews with applicants
- Local coordinator for host families in the Ruhr Area, Germany

Voluntary work for the outpatient hospice service [St. Christophorus Dortmund](#)

2016 - present

- Psycho-social support for families with kids or teens who suffer from a life-threatening or life-limiting illness