

## Curriculum vitae

PD Dr. rer. nat. DANIELA SAMMLER

### Current Affiliation

Max Planck Institute for Human Cognitive and Brain Sciences  
 Otto Hahn Group Neural Bases of Intonation in Speech and Music  
 Stephanstr. 1a, 04103 Leipzig, Germany  
 Phone: +49 341 9940 2679  
 Email: [sammler@cbs.mpg.de](mailto:sammler@cbs.mpg.de)  
 Homepage: <http://www.cbs.mpg.de/independent-research-groups/intonation-in-speech>



### Education

01/2018	<b>Habilitation and Venia Legendi in Psychology</b> at University of Leipzig “The melodic mind: Neural bases of intonation in speech and music”
11/2008	<b>Dr. rer. nat. in Psychology</b> at University of Leipzig (summa cum laude) “The neuroanatomical overlap of syntax processing in music and language: Evidence from lesion and intracranial ERP studies”
04/2004	<b>Diploma in Psychology</b> at University of Leipzig (with distinction, 1.1) “Music and Emotion: Electrophysiological correlates of the processing of pleasant and unpleasant music”
06/2000	<b>Licence in Psychology</b> , Université Louis Pasteur, Strasbourg, France
07/1997	<b>Abitur</b> (with distinction, 1.0)

### Academic Appointments

since 07/2013	<b>Independent Research Group Leader</b> , Otto Hahn Group Neural Bases of Intonation in Speech and Music, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
07/2014 - 10/2014	<b>Visiting researcher</b> at Western Sydney University, MARCS Institute for Brain, Behaviour and Development, Sydney, Australia
10/2011 - 06/2013	<b>Visiting researcher</b> at University of Glasgow, School of Psychology and Centre for Cognitive Neuroimaging (CCNi), Glasgow, Scotland, UK
04/2009 - 09/2011	<b>Postdoctoral researcher</b> at Department of Neuropsychology, MPI for Human Cognitive and Brain Sciences, Leipzig, Germany
04/2008 - 03/2009	<b>Postdoctoral researcher</b> at Université Nord-de-France, Lille and Hôpital de la Pitié-Salpêtrière, Paris, France
04/2004 - 03/2008	<b>PhD student</b> in Max Planck Research Group Neurocognition of Music, MPI for Human Cognitive and Brain Sciences, Leipzig, Germany
10/2000 - 03/2004	<b>Student assistant</b> in Max Planck Research Group Neurocognition of Music, MPI for Human Cognitive and Brain Sciences, Leipzig, Germany

## Shortlisting

---

2016	Full Professorship (W2) for Cognitive and Clinical Neuroscience, Technical University Dresden, Germany: 2 <sup>nd</sup> on list
2017	Full Professorship (A98) for General Psychology, Alpen Adria University Klagenfurt, Austria: 3 <sup>rd</sup> on list
2018	Full Professorship (A99) for Psycholinguistics, University of Vienna, Austria

## Awards and honours

---

2010	<b>Otto Hahn Medal</b> of the Max Planck Society, 5.000 €
2010	<b>Otto Hahn Award</b> of the Max Planck Society, 800.000 €
2010	<b>Poster Award</b> , 16 <sup>th</sup> Annual Meeting of the Organization of Human Brain Mapping
2012	<b>Gold Medal for outstanding achievements in the preservation of historic monuments in Europe</b> , 10 <sup>th</sup> denkmal (Europe's Leading Trade Fair for Conservation, Restoration and Old Building Renovation), Leipzig, Germany

## Research Focus on the Neurocognition of Language and Music

---

- **Language:** communication, syntax, prosody and their interaction, pragmatics
- **Music:** syntax in music perception and production, emotion, joint action
- **Language & Music:** neurocognitive similarities between the two domains
- Experimental **electrophysiology** and **neuroimaging** in healthy adults, neurological patients, and professional musicians

## Selected publications

---

2018	Hellbernd, N., <b>Sammler, D.</b> (2018). Neural bases of social communicative intentions in speech. <i>Social Cognitive and Affective Neuroscience</i> , 13, 604-615. <b>[IF 2016: 3.937]</b>
2015	<b>Sammler, D.</b> , Grosbras, M.-H., Anwander, A., Bestelmeyer, P. E. G., Belin, P. (2015). Dorsal and ventral pathways for prosody. <i>Current Biology</i> , 25, 3079-3085. <b>[IF 2015: 8.983]</b>
2013	<b>Sammler, D.*</b> , Novembre, G.*, Koelsch, S., Keller, P. E. (2013). Syntax in a pianist's hand: ERP signatures of "embodied" syntax processing in music. <i>Cortex</i> , 49, 1325-1339. <b>[IF 2013: 6.042]</b> *equal contribution
2013	<b>Sammler, D.</b> , Koelsch, S., Ball, T., Brandt, A., Grigutsch, M., ..., A. D., Schulze-Bonhage, A. (2013). Co-localizing linguistic and musical syntax with intracranial EEG. <i>NeuroImage</i> , 64, 134-146. <b>[IF 2013: 6.132]</b>
2010	<b>Sammler, D.</b> , Kotz, S. A., Eckstein, K., Ott, D. V. M., Friederici, A. D. (2010). Prosody meets syntax: the role of the corpus callosum. <i>Brain</i> , 133, 2643-2655. <b>[IF 2010: 9.232]</b>

## Conference talks, guest lectures and presentations

---

since 2007	9 conference talks (8 international)
since 2009	14 invited talks at conferences (3 international)
since 2009	32 invited talks at universities and research institutes (12 international)
since 2011	10 public science talks (1 international)
since 2013	2 organized workshops and symposia (1 international)

## Memberships

---

Cognitive Neuroscience Society (CNS)  
 Society for the Neurobiology of Language (SNL)  
 Society for Music Perception and Cognition (SMPC)  
 Deutsche Gesellschaft für Sprachwissenschaft (DGfS) [German Soc. for Linguistics]  
 Deutsche Gesellschaft für Psychologie (DGPs) [German Society for Psychology]  
 Deutscher Hochschulverband (DHV) [German Academic Association]

## Ad-hoc reviewing

---

<b>Funding agencies</b>	European Research Council (ERC), Portuguese Foundation for Science and Technology (FCT), National Science and Engineering Council of Canada (NSERC), National Science Foundation USA (NSF), National Science Centre Poland (NCN), Swiss National Science Foundation (SNSF)
<b>Editorial Board</b>	Brain Sciences (guest); Evolutionary Linguistic Theory; Frontiers in Neuroscience; Music & Science
<b>Journals: Neuroscience</b>	BMC Neuroscience; Brain; Brain Research; Brain Structure and Function; Brain Topography; Cerebral Cortex; Cognitive Neurodynamics; Cognitive Neuroscience; Cortex; Frontiers in Auditory Cognitive Neuroscience; Human Brain Mapping; International Journal of Psychophysiology; Journal of Cognitive Neuroscience; Journal of Neurophysiology; Journal of Neuroscience; Nature Communications; NeuroImage; Neuropsychologia; PloS ONE; Psychophysiology; Nature Scientific Reports; Social Cognitive and Affective Neuroscience
General Psychology	Behavior Research Methods; Cognition; Learning and Instruction; Philosophical Transactions of the Royal Society B; Quarterly Journal of Experimental Psychology; Royal Society Open Science
Linguistics	Aphasiology; Brain and Language; Language, Cognition and Neuroscience
Music cognition	Music Perception; Music & Science; Psychomusicology
<b>Conferences</b>	Human Brain Mapping (HBM), Society for Neurobiology of Language (SNL)
<b>PhD theses</b>	University of Trento (Italy), University of Turku (Finland)

## Media coverage and public outreach

---

since 2010	15 articles in daily newspapers and popular science journals (e.g., Süddeutsche Zeitung, GEO, Spektrum, Bild der Wissenschaft, Welt am Sonntag, Frankfurter Allgemeine Sonntagszeitung, New Scientist, The Economist, La Repubblica)
since 2011	12 public science talks (1 international)
since 2015	10 radio interviews (e.g., Deutschlandfunk, BR Klassik, Kulturradio rbb, Hessischer Rundfunk 2, MDR Kultur, ORF, Czech Radio, Radio France)
since 2016	3 TV documentaries (MDR LexiTV “Secrets of musical geniuses”, ZDF/arte TV “Brain beats”, 3sat “nano”)
since 2016	1 public exhibition, museum (Deutsches Hygiene-Museum Dresden: “LANGUAGE – World of words, signs, gestures”)

## Methods (general overview)

---

Psychophysical and psychoacoustic behavioural measures  
 Electroencephalography (EEG) in single and dual setups  
 Functional, structural, and diffusion-weighted magnetic resonance imaging (MRI)  
 Subdural electrocorticography (ECoG)  
 Transcranial magnetic stimulation (TMS)  
 Work with healthy adults and neurological patients (stroke, epilepsy)

## Research Administration

---

since 2016	Member of the Ethics Council of the Max Planck Society
since 2015	Member of several Appointment Committees of the Max Planck Society (appointments of Max Planck directors and research group leaders)
since 2013	Elected scientific staff member of the Humanities & Social Sciences Section of the Max Planck Society
since 2013	Mentor for young female scientists in the Minerva-FemmeNet of the Max Planck Society ( <a href="http://www.minerva-femmenet.mpg.de">http://www.minerva-femmenet.mpg.de</a> )
since 2013	Associate Faculty Member, International Max Planck Research School (IMPRS) NeuroCom
2010-2011	Module coordinator "Biological Psychology", including registration and examination of students in summer and winter term, Martin Luther University Halle-Wittenberg, Halle/Saale, Germany

## Collaboration partners

---

### Language & Communication

Prof. P. Belin	Institut des Neurosciences de La Timone, Université Aix-Marseille, France
Prof. T. G. Bever	University of Arizona, Tucson, Arizona, USA
Prof. A. D. Friederici	Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany
Prof. S. A. Kotz	Maastricht University, Maastricht, The Netherlands

### Music

Prof. P. E. Keller	Western Sydney University, Sydney, Australia
Prof. S. Koelsch	University of Bergen, Norway
Dr. G. Novembre	University College London, UK
Prof. S. Samson	Hôpital de la Pitié-Salpêtrière, Paris, Université Lille Nord-de- France, Lille, France

### Neurocognition

Prof. C. E. Elger	Department of Epileptology, University Hospital Bonn, Germany
Prof. J. Meixensberger	Clinic and Policlinic for Neurosurgery, University Hospital of Leipzig, Germany
Prof. Schulze-Bonhage	Freiburg Epilepsy Centre, University Hospital of Freiburg, Freiburg, Germany
Prof. A. Villringer	Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany

## Publications

### Metrics (as of 30 September 2018)

---

<b>h-index:</b>	19 (Web of Science), 19 (Scopus), 22 (Google Scholar)
<b>number of citations:</b>	1567 (Web of Science), 1723 (Scopus), 3245 (Google Scholar)
<b>cumulative IF:</b>	170 (Web of Science, Journal Citation Reports)

### Books and chapters

---

1. **Sammler, D.** (2018). *The melodic mind: Neural bases of intonation in speech and music.* (MPI Series in Human Cognitive and Brain Sciences, Vol. 195). Leipzig: Max Planck Institute for Human Cognitive and Brain Sciences.
2. **Sammler, D.** (2017). Neurophysiologische Aspekte des Singens. In: M. Fuchs (Ed.). *Die Stimme im pädagogischen Alltag.* (pp. 187-196). Berlin: Logos-Verlag.
3. **Sammler, D.** (2009). The neuroanatomical overlap of syntax processing in music and language: Evidence from lesion and intracranial ERP studies. (MPI Series in Human Cognitive and Brain Sciences, Vol. 108). Leipzig: Max Planck Institute for Human Cognitive and Brain Sciences.

### Five selected publications (peer reviewed)

---

4. Hellbernd, N.°, **Sammler, D.** (2018). Neural bases of social communicative intentions in speech. *Social Cognitive and Affective Neuroscience*, 13, 604-615. **[IF 2017: 3.500]** °student author
5. **Sammler, D.**, Grosbras, M.-H., Anwander, A., Bestelmeyer, P. E. G., Belin, P. (2015). Dorsal and ventral pathways for prosody. *Current Biology*, 25, 3079-3085. **[IF 2015: 8.983]**
6. **Sammler, D.\***, Novembre, G.\*, Koelsch, S., Keller, P. E. (2013). Syntax in a pianist's hand: ERP signatures of "embodied" syntax processing in music. *Cortex*, 49, 1325-1339. **[IF 2013: 6.042]** \*equal contribution
7. **Sammler, D.**, Koelsch, S., Ball, T., Brandt, A., Grigutsch, M., ..., A. D., Schulze-Bonhage, A. (2013). Co-localizing linguistic and musical syntax with intracranial EEG. *NeuroImage*, 64, 134-146. **[IF 2013: 6.132]**
8. **Sammler, D.**, Kotz, S. A., Eckstein, K., Ott, D. V. M., Friederici, A. D. (2010). Prosody meets syntax: the role of the corpus callosum. *Brain*, 133, 2643-2655. **[IF 2010: 9.232]**

### Publications in peer reviewed journals (continued)

---

9. Sun, Y., Lu, X., Ho, H. T., Johnson, B. W., **Sammler, D.**, Thompson, W. F. (2018). Syntactic processing in music and language: parallel abnormalities observed in congenital amusia. *NeuroImage Clinical*, 19, 640-651. **[IF 2017: 3.869]**
10. **Sammler, D.**, Cunitz, K.°, Gierhan, S. M. E., Anwander, A., Adermann, J., Meixensberger, J., Friederici, A. D. (2018). White matter pathways for prosodic structure building: A case study. *Brain and Language*, 183, 1-10. **[IF 2017: 2.851]** °student author
11. Speck, I. K., Echternach, M., **Sammler, D.**, Schulze-Bonhage, A. (2018). Frontal lobe epileptic seizures are accompanied by elevated pitch during verbal communication. *Epilepsia*, 59, e23-e27. **[IF 2017: 5.067]**
12. Bianco, R.°, Novembre, G., Keller, P. E., Villringer, A., **Sammler, D.** (2018). Musical genre-dependent behavioural and EEG signatures of action planning. A comparison between classical and jazz pianists. *NeuroImage*, 169, 383-394. °student author **[IF 2017: 5.426]**
13. Hellbernd, N.°, **Sammler, D.** (2016). Prosody conveys speaker's intentions: Acoustic cues for speech act perception. *Journal of Memory and Language*, 88, 70-86. **[IF 2016: 3.065]** °student author
14. Merrill, J.°, Bangert, M., **Sammler, D.**, Friederici, A. D. (2016). Classifying song and speech: Effects of focal temporal lesions and musical disorder. *Neurocase*, 22, 496-504. **[IF 2016: 0.988]** °student author

15. Novembre, G., **Sammler, D.**, Keller, P. E. (2016). Self-other entrainment and co-representation are linked via alpha oscillations in musical joint action. *Neuropsychologia*, 89, 414-25. **[IF 2016: 3.197]**
16. Bianco, R.°, Novembre, G., Keller, P.E., Kim, S.-G., ..., **Sammler, D.** (2016). Neural networks for harmonic structure in music perception and action. *NeuroImage*, 142, 454-464. **[IF 2016: 5.835]** ° student author
17. Bianco, R.°, Novembre, G., Keller, P. E., Scharf, F.°, Friederici, A. D., Villringer, A., **Sammler, D.** (2016). Syntax in action has priority over movement selection in piano playing: An ERP study. *Journal of Cognitive Neuroscience*, 28, 41-56. **[IF 2016: 3.108]** ° student author
18. Maffongelli, L., Bartoli, E., **Sammler, D.**, Koelsch, S., Campus, C., Olivier, E., Fadiga, L., D'Ausilio, A. (2015). Distinct brain signatures of content and structure violation during action sequence observation. *Neuropsychologia*, 75, 30-39. **[IF 2015: 2.989]**
19. Alonso, I.°, **Sammler, D.**, Valabrègue, R., Dinkelacker, V., Dupont, S., Belin, P., Samson, S. (2014). Hippocampal sclerosis affects fMR-adaptation of lyrics and melodies in songs. *Frontiers in Human Neuroscience*, 8, Article 111. **[OA] [IF 2014: 3.626]** ° student author
20. Besson, P., Dinkelacker, V., Valabrègue, R., Thivard, L., Leclerc, X., Baulac, M., **Sammler, D.**, Colliot, O., Lehericy, S., Samson, S., Dupont, S. (2014). Structural connectivity differences in left and right temporal lobe epilepsy. *NeuroImage*, 100, 135-144. **[IF 2014: 6.357]**
21. Merrill, J.°, **Sammler, D.**, Bangert, M., Goldhahn, D., Lohmann, G., Turner, R., Friederici, A. D. (2012). Perception of words and pitch patterns in song and speech. *Frontiers in Psychology*, 3, Article 76. **[OA] [IF 2013: 2.843]** ° student author
22. **Sammler, D.**, Koelsch, S., Friederici, A. D. (2011). Are left fronto-temporal “language areas“ a prerequisite for normal music-syntactic processing? *Cortex*, 47, 659-673. **[IF 2011: 6.080]**
23. **Sammler, D.**, Baird, A., Valabrègue, R., Clément, S., Dupont, S., Belin, P., Samson, S. (2010). The relationship of lyrics and tunes in the processing of unfamiliar songs: An fMR adaptation study. *The Journal of Neuroscience*, 30, 3572-3578. **[IF 2010: 7.271]**
24. **Sammler, D.**, Koelsch, S., Ball, T., Brandt, A., ..., Schulze-Bonhage, A. (2009). Overlap of musical and linguistic syntax processing: Intracranial ERP evidence. *Annals of the New York Academy of Sciences*, 1169, 494-498. **[IF 2009: 2.670]**
25. Fritz, T., Jentschke, S., Gosselin, N., **Sammler, D.**, ..., Koelsch, S. (2009). Universal recognition of three basic emotions in music. *Current Biology*, 19, 573-576. **[IF 2009: 10.992]**
26. Koelsch, S., Schulze, K., **Sammler, D.**, Fritz, T., Mueller, K., Gruber, O. (2009). Functional architecture of verbal and tonal memory: An fMRI study. *Human Brain Mapping*, 30, 859-873. **[IF 2009: 6.256]**
27. Koelsch, S., **Sammler, D.**, Jentschke, S., Siebel, W. A. (2008). EEG correlates of moderate intermittent explosive disorder. *Clinical Neurophysiology*, 119, 151-162. **[IF 2008: 2.972]**
28. Koelsch, S., **Sammler, D.** (2008). Cognitive components of regularity processing in the auditory domain. *PLoS one*, 3, e2650. **[OA] [IF 2009: 4.351]**
29. **Sammler, D.**, Grigutsch, M., Fritz, T., Koelsch, S. (2007). Music and Emotion: Electrophysiological correlates of the processing of pleasant and unpleasant music. *Psychophysiology*, 44, 293-304. **[IF 2007: 3.349]**
30. Koelsch, S., Remppis, A., **Sammler, D.**, Jentschke, S., ..., Siebel, W. A. (2007). A Cardiac signature of emotionality. *European Journal of Neuroscience*, 26, 3328-3338. **[IF 2007: 3.673]**
31. Koelsch, S., Jentschke, S., **Sammler, D.**, Mietchen, D. (2007). Untangling syntactic and sensory processing: An ERP study of music perception. *Psychophysiology*, 44, 476-490. **[IF 2007: 3.349]**
32. Koelsch, S., Heinke, W., **Sammler, D.**, Olthoff, D. (2006). Auditory processing during deep propofol sedation and recovery from unconsciousness. *Clinical Neurophysiology*, 117, 1746-1759. **[IF 2006: 2.718]**
33. Koelsch, S., Gunter, T. C., Wittfoth, M., **Sammler, D.** (2005). Interaction between syntax processing in language and in music: An ERP study. *Journal of Cognitive Neuroscience*, 17, 1565-1577. **[IF 2005: 4.533]**

34. Heinke, W., Kenntner, R., Gunter, T. C., **Sammler, D.**, Olthoff, D., Koelsch, S. (2004). Sequential effects of increasing propofol sedation on frontal and temporal cortices as indexed by auditory event-related potentials. *Anesthesiology*, 100, 617-625. [IF 2004: 4.005]
35. Koelsch, S., Kasper, E., **Sammler, D.**, Schulze, K., Gunter, T., Friederici, A. D. (2004). Music, language and meaning: Brain signatures of semantic processing. *Nature Neuroscience*, 7, 302-307. [IF 2004: 16.980]
36. Scheid, R., Voltz, R., Guthke, T., **Sammler, D.**, von Cramon, D. Y. (2003). Neuropsychiatric findings in anti-MA2-positive limbic encephalitis. *Neurology*, 61, 1159-1160. [IF 2003: 5.678]
37. Koelsch, S., Gunter, T. C., Schröger, E., Tervaniemi, M., **Sammler, D.**, Friederici, A. D. (2001). Differentiating ERAN and MMN: An ERP study. *Neuroreport*, 12, 1385-1389. [IF 2001: 2.374]

#### Publications in German scientific journals

---

38. **Sammler, D.** (2016). Musik- und Sprachwahrnehmung bei Epilepsiepatienten. *Zeitschrift für Epileptologie*, 29, 16-20.
39. **Sammler, D.** (2014). Prosodie – Die Musik der Sprache. *LogoTHEMA*, 11, 9-13.
40. **Sammler, D.** (2011). Amusie und Sprachstörungen. *Sprachheilarbeit*, 56, 194-197.

#### Publications currently under peer review

---

41. Harding, E.°, **Sammler, D.**\*, Henry, M.°, Large, E., Kotz, S. A. (minor revision). Cortical tracking of rhythm in music and speech. ° student author, \*equal contribution
42. Hartwigsen, G., Scharinger, M., **Sammler, D.** (submitted). Modulating cortical dynamics in language, speech, and music.
43. Martins, M. J. D., Bianco, R.°, **Sammler, D.**, Villringer, A. (under review). Fractals in action: An fMRI study on the generation of new hierarchical levels in motor sequences. ° student author
44. Torppa, R., Faulkner, A., Laasonen, M., **Sammler, D.** (under review). Links of prosodic stress perception and musical activities to language skills of children with CIs and normal hearing.
45. Vanzella, P., Balardin, J. B., Furucho, R. A., Zimeo Morais, G. A., Braun Janzen, T., **Sammler, D.**, Sato, J. R. (under review). fNIRS responses in professional violinists while playing duets: Evidence for distinct leader and follower roles at brain level.

#### Publications in preparation for peer review

---

46. Bianco, R.°, Novembre, G., Hollinger, A., Steele, C., Kohler, N.°, Keller, P. E., Villringer, A., **Sammler, D.** (forthcoming). Prefrontal cortex supports structure-based online action planning: An fMRI study of piano playing. ° student author
47. Govaert, G.°, Novembre, G., Bianco, R.°, Keller, P. E., **Sammler, D.** (forthcoming). Motor involvement speeds up error detection in music. ° student author
48. Hellbernd, N.°, **Sammler, D.** (forthcoming). Intentional prosody in Arabic and German: A cross-cultural comparison. ° student author
49. **Sammler, D.**, Just, A.°, Chien, P.-J.°, Hellbernd, N.°, Nan, Y. (forthcoming). Conveying intention through prosody: A cross-cultural comparison of German and Mandarin Chinese. ° student author
50. **Sammler, D.**, Salditt, M.°, Steininger, J.°, Hellbernd, N.° (forthcoming). Are actors better communicators? Intention recognition in acted and natural prosody. ° student author
51. **Sammler, D.**, Bestelmeyer, P. E. G., Belin, P. (forthcoming). Prosody conveys communicative intentions by activating complementary systems of social cognition.
52. **Sammler, D.**, Zotschew, T.°, Dotzer, M.°, Matin, E.°, Hartwigsen, G. (forthcoming). Vocal pitch perception in right premotor cortex: A TMS study. ° student author

## List of Talks

### Organisation of Conferences, Workshops, und Symposia (2)

---

- 08/2015 **Sammler, D.** (2015). *The Melodic Mind*. Workshop. Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 10/2013 **Sammler, D.**, Anwander, A., Belin, P. (2013). *CCNI workshop on Diffusion-weighted imaging*. Workshop. Centre for Cognitive Neuroimaging (CCNI) & Institute of Neuroscience and Psychology (INP), University of Glasgow, UK.

### Invited Talks at Conferences (14)

---

- 07/2018 “Pathways for Prosody“, Workshop, Crossing boundaries: On sensorimotor and cognitive systems, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 04/2018 “Neuropragmatics of prosody: from contour to meaning“, Workshop, Neurophonetics: Representing and processing phonetic units in the brain, Philipps-University Marburg, Germany.
- 02/2016 “Neurophysiologie des Singens“, 14. Leipziger Symposium zur Kinder- und Jugendstimme, Leipzig, Germany.
- 11/2015 “Music and action – windows into the origins of language?“, International Workshop on Theory of Language and the Debate on Language Origins, University of Trento, Italy.
- 09/2015 “Syntax in a pianist’s hand – principles of motor planning in expert pianists“, International Conference of Students of Systematic Musicology, SysMus 2015, Leipzig, Germany.
- 04/2015 “Music and language: Evidence from patients with epilepsy“, Gemeinsame Jahrestagung der Deutschen und Österreichischen Gesellschaften für Epileptologie und der Schweizerischen Liga gegen Epilepsie, Dresden, Germany.
- 03/2015 “Fractionating prosody – pathways and mechanisms“, SMART conference, Amsterdam, The Netherlands.
- 11/2014 “Musik und früher Spracherwerb“, Fachtagung der Stiftung Zuhören und des Hessischen Rundfunks 2, “Chancen der sprachlichen Vielfalt nutzen!“, Wiesbaden, Germany.
- 03/2014 “Prosody perception in laryngeal premotor cortex“, 36<sup>th</sup> Annual Conference of the German Linguistic Society, Marburg University, Marburg/Lahn, Germany .
- 11/2012 “Grammatik der Handlung – Parallelen zur Musik- und Sprachverarbeitung“, 22. Jahrestagung der DGNR, Nürnberg/Fürth, Germany.
- 09/2012 “Shared but not the same: Co-localizing syntax in music and language“, Language, music and cognition workshop, University of Cologne, Germany.
- 02/2012 “(Co)Localizing music and language in the human brain with EEG and fMRI“, SIMAL – First international workshop on segregation and integration in music and language, Eberhard Karls University Tübingen, Germany.
- 10/2011 “Music and action – prediction through syntax“, SIEMPRE Intermediate Workshop, Italian Institute of Technology, Genoa, Italy.
- 05/2009 “Musik und Sprache im menschlichen Gehirn“, 23. Jahrestreffen AK Kinder und Jugendliche der Gesellschaft für Neuropsychologie (GNP), Flehingen, Germany.

### Conference Talks (9)

---

- 10/2015 “Dual streams for prosody in the right hemisphere“, 7th Annual Meeting of the Society for the Neurobiology of Language, SNL 2015, Chicago, IL, USA.



- 07/2014 “Dorsal and ventral pathways for prosody”, 12th International Conference on Cognitive Neuroscience (ICON), Brisbane, Australia.
- 03/2014 “Prosody perception in the laryngeal premotor cortex”, Tagung experimentell arbeitender Psychologen 2014 (TeaP), Gießen, Germany.
- 11/2013 “Prosody perception in the laryngeal premotor cortex”, SNL 2013 Annual Meeting, San Diego, California, USA.
- 09/2012 “Prosody meets syntax: localization and connectivity”, 16<sup>th</sup> World Congress of the International Organization of Psychophysiology, Pisa, Italy.
- 04/2012 “Syntax in a pianist’s hand: ERP signatures of ‘embodied’ syntax processing in music”, Annual meeting of the British Association for Cognitive Neuroscience, Newcastle, UK.
- 08/2010 “Music and action: Do they share resources?”, ICMPC XI, Seattle, USA.
- 04/2010 “Co-localizing the processing of music and language in the human brain”, British Psychological Society Annual Conference, Stratford-upon-Avon, UK.
- 05/2007 “Comparing linguistic and music syntactic processing by means of subdural recordings”, Language and Music as Cognitive Systems, Cambridge, UK.

### Invited Talks at Universities (32)

---

- 11/2018 “Neuropragmatics of prosody: from contour to meaning”, MAMPF-Kolloquium, Ludwig-Maximilians-Universität München.
- 10/2018 „Prosodie als Schnittpunkt zwischen Musik und Sprache“, Tag der Sprachforschung, Martin-Luther-Universität Halle/Wittenberg.
- 09/2018 “Hirnprozesse während des Klavierspielens: Von der musikalischen Idee zur Handlung”, Seminar, Claussen-Simon-Stiftung, Ratzeburg, Germany
- 05/2018 “Musical action planning in expert pianists”, Seminar, Institute for Music in Human and Social Development, University of Edinburgh, UK.
- 02/2018 “The Melodic Mind: Neural bases of intonation in speech and music“, Spring School on Language, Music and Cognition: Organizing Events in Time, University of Cologne, Germany.
- 12/2017 “The Melodic Mind: Neural bases of intonation in speech and music“, Seminar, University Zurich, Switzerland.
- 02/2017 “Musical action planning in expert pianists“, Seminar, Goldsmiths, University of London, UK.
- 01/2017 “Voice or words – the neural contribution of prosody to communication“, Seminar, Brain Language Laboratory, Free University Berlin, Germany.
- 10/2016 “Motor planning in expert pianists – the special role of musical syntax“, Lecture, Dresden Music Cognition Lab, Technical University Dresden, Germany.
- 08/2016 “Neural networks of music perception and production – the special role of syntax“, Seminar, Helsinki Summer School in Cognitive Neuroscience, Helsinki, Finland.
- 05/2016 “Neural bases of speech prosody“, Colloquium, Bonn Lecture Series in Neuroscience, University Hospital Bonn, Germany.
- 12/2015 “Voice or words – the neural contribution of prosody to communication“, Seminar, School of Psychology, Bangor University, Wales, UK.
- 12/2015 “The brain basis for music and language – in search of common roots“, Seminar, Faculty of Behavioral Sciences, University of Helsinki, Finland.
- 11/2015 “Aesthetic dialogue – Understanding the unsaid“, Workshop on The Future of Empirical Aesthetics, Max Planck Institute for Empirical Aesthetics, Frankfurt/Main, Germany.
- 07/2015 “The music of speech: Fractionating prosody“, Seminar, IMPRS Summer School, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.

- 07/2015 “Pathways for prosody“, Colloquium, Neurocentre, University Hospital Freiburg, Germany.
- 08/2014 “Neural pathways for prosody“, Colloquium, MARCS Institute, University of Western Sydney & Centre of Excellence in Cognition and its Disorders, Macquarie University, Sydney, Australia.
- 11/2013 “Neuronale Entschlüsselung von prosodisch kodierten Sprecherabsichten“, Seminar, Logopädenfachtagung – Sprachentwicklungsforschung und Logopädie, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 10/2013 “Understanding meaning and intentions in speech prosody“, Seminar, Department of General Psychology and Cognitive Neuroscience, Friedrich Schiller University, Jena, Germany.
- 06/2013 “Understanding meaning and intentions in speech intonation“, Colloquium, Institute for Music in Human and Social Development, University of Edinburgh, UK.
- 05/2013 “Understanding meaning and intentions in speech intonation“, Colloquium, Institute of Neuroscience and Psychology, University of Glasgow, UK.
- 04/2013 “Two complementary mechanisms for decoding intentions in speech intonation“, Seminar, School of Critical Studies, University of Glasgow, UK.
- 09/2012 “Disintegration of music and language after brain lesion“, EBRAMUS-workshop, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 12/2011 “Seminar Berufsfelder – Kognitive Neurowissenschaften“, Seminar, Martin Luther University Halle-Wittenberg, Germany.
- 12/2011 “About the relationship of music and language in the human brain“, Colloquium, Institute for Neuroscience and Psychology, University of Glasgow, UK.
- 04/2011 “Hier spricht die Musik – Über die Beziehung von Musik und Prosodie zur Sprachverarbeitung“, Colloquium, Cognitive Neurology Outpatient Clinic, Leipzig, Germany.
- 02/2011 “Music and action: Do they share ‘syntactic’ resources?“, Colloquium, Neuromusic Gesprächskreis, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany .
- 05/2011 “About the relationship of music and language in the human brain“, Colloquium, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 05/2010 “Wie das Gehirn Sprache und Musik verarbeitet“, Lecture, Johannes Gutenberg University, Mainz, Germany (together with Angela D. Friederici).
- 08/2009 “Neuropsychologie der Sprach- und Musikwahrnehmung“, Invited Workshop, Evangelische Akademie Villigst, Germany.
- 03/2009 “Cortical representation of syntax in language and music“, Symposium “10 Jahre Epileptologie am Universitätsklinikum Freiburg“, Freiburg, Germany.
- 02/2009 “Cortical representation of syntax in language and music“, Colloquium, Laboratoire “Neurosciences sensorielles, comportement, cognition“, Lyon, France.

### Poster presentations (60)

---

- since 2004 19 posters as first author (16 at international conferences)
- since 2006 24 posters as co-author (16 at international conferences)
- since 2013 17 posters as senior author (10 at international conferences)

### Public Science Talks (10)

---

- 09/2018 “Miles Davis ist nicht Mozart: Wie sehr Musik unser Gehirn verändert“ [Miles Davis is not Mozart: How much music changes our brain], Science Market at Max Planck Day 2018, Munich, Germany
- 04/2018 “Musik und Sprache – auf der Suche nach gemeinsamen Wurzeln“ [Music and language – in search of common roots], 41. Bibliothekstagung [41<sup>st</sup> Library congress], Leipzig, Germany.

- 02/2018 "Unser Gehirn – unsere Forschung" [Our Brain – our research], Talk for children of the Theater der Jungen Welt, Leipzig, Germany.
- 02/2016 "Hier spricht die Musik!" [Here, music speaks for itself!], Musicophilia, Schwere Reiter, Munich, Germany.
- 07/2015 "Here, music speaks for itself!", Grand Opening of the IMPRS Summer School, Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- 01/2015 "Hier spricht die Musik!", Hörfest des Hessischen Rundfunks 2, Wiesbaden, Germany.
- 06/2014 "Hier spricht die Musik!", Lange Nacht der Wissenschaft, Leipzig, Germany.
- 04/2014 "Hier spricht die Musik!", Musicophilia, Radialsystem V, Berlin, Germany.
- 07/2013 "Träume und Gefühle aus der Sicht der Neuropsychologie" [Dreams and emotions – a neuropsychological perspective], Hörerakademie at the 68th Sommerliche Musiktage, Hitzacker, Germany.
- 10/2011 "Music, language, and action in the human brain", Festival della Scienza, Casa Paganini, Genoa, Italy.

## Research projects & funding

### On-going projects

---

2018-2020	Neural bases of interpersonal coordinated behaviour during music performance (1 PhD student, funded by Friedrich Naumann Stiftung)
2017-2020	Neural bases of joint music production (1 PhD student, funded by MPI-CBS, Dept. of Neurology)
2017-2019	Temporal dynamics of prosody perception (1 PhD student, funded by Otto Hahn Award & MPI-CBS, Dept. of Neuropsychology)
2016-2019	Neural segregation and integration of intonation and lexical tone: A cross-cultural approach (1 PhD student, funded by IMPRS NeuroCom)
2013-2018	Causal role of IFG in syntax-based motor control of piano performance (material expenses, funded by Otto Hahn Award)

### Past projects

---

2013-2017	Neural bases of prosodically coded intentions (1 PhD student, funded by Otto Hahn Award)
2012-2017	Principles of musical action planning: the special role of syntax (1 PhD student, funded by Otto Hahn Award & MPI-CBS, Dept. of Neurology)
2010-2016	Influence of neurocognitive entrainment to meter on syntactic comprehension in music and language (1 PhD student, Otto Hahn Award & Minerva Group "Rhythm in Communication")
2013-2015	Musical joint action investigated with dual EEG (MPRG "Music Cognition and Action" & MARCS Institute, Western Sydney University, Australia)
2011-2013	Pathways for prosody (1 own postdoc-position, Otto Hahn Award)

### Funding

---

2014	<b>"Nonverbal communication in speech and music"</b> – Visiting scholarship <ul style="list-style-type: none"><li>• Applicant: Dr Daniela Sammler</li><li>• Funding by: MARCS Institute, Western Sydney University, Australia</li><li>• Amount: \$9.000 (~€6.200)</li></ul>
2013-2018	<b>"Neural bases of intonation in speech and music"</b> – Otto Hahn Award <ul style="list-style-type: none"><li>• Applicant: Dr Daniela Sammler</li><li>• Funding by: Max Planck Society</li><li>• Amount: ~€800.000</li></ul>
1999-2000	<b>Licence de Psychologie</b> – ERASMUS scholarship <ul style="list-style-type: none"><li>• Applicant: Daniela Sammler</li><li>• Funding by: ERASMUS</li><li>• Amount: €1.200</li></ul>

## Teaching & Supervision

### Qualifications

---

2015-2018	Saxonian Certificate in University Didactics (200 teaching units [TU])
	Module 1 “Basics in university didactics” [Hochschuldidaktische Grundlagen] (60 TU)
	Module 2 “Activating teaching techniques” [Aktivierende Lehrmethoden] (16 TU)
	“Supervising final year projects” [Abschlussarbeiten wirksam betreuen] (16 TU)
	“Evaluation, marks, exams” [Bewerten, Benoten, Prüfen](16 TU)
	“Evaluation of essays and theses” [Beleg- und Diplomarbeiten bewerten](4 TU)
	“Construction of exam questions” [Prüfungsfragen konstruieren](4 TU)
	“Effective counselling” [Wirksame Beratungen] (5TU)
	Module 3 “Advanced university didactics” (80TU)
2015	Strategic planning of research careers (9 TU)
2015	Management Module 1: Successfully building, managing and leading a research team (12 TU)
2015	Management Module 2: Research team leader – task, role and challenges (13 TU)

### Seminars and lectures

---

#### University of Leipzig

2018/19	Music Psychology – Cognition and Perception (Seminar series, BA Musicology)
2017/18	Introduction to Psychology (Seminar series, B.Sc. Psychology)
2016	Cognitive Psychology II – Language and Cognition (Seminar series, B.Sc. Psychology)
2015/16	Introduction to Psychology (Seminar series, B.Sc. Psychology)
2015	Cognitive Psychology II – Language and Cognition (Seminar series, B.Sc. Psychology)
2014/15	Introduction to Psychology (Seminar series, B.Sc. Psychology)
2014/15	Empirical work – Posner paradigm (Laboratory courses, B.Sc. Psychology)
2014	Cognitive Psychology II – Language and Cognition (Seminar series, B.Sc. Psychology)
2013/14	Introduction to Psychology (Seminar series, B.Sc. Psychology)
2006	Perception (Seminar talk, Minor in Psychology, with Dr Kirsten Volz)
2005/06	Biological Psychology (Lecture, Minor in Psychology, with Dr Stefan Koelsch)

#### International Max Planck Research School (IMPRS), MPI for Human Cognitive and Brain Sciences

2016	Language and Music (Lecture, doctoral students)
------	---

#### Martin Luther University Halle-Wittenberg

2010-2011	Module coordinator Biological Psychology (B.Sc. Psychology)
2010/11	Biological Psychology (Lecture series, B.Sc. Psychology)
2010/11	Biological Psychology (Laboratory courses, B.Sc. Psychology)
2010	Biological Psychology – Music & Brain (Seminar series, B.Sc. Psychology)
2009/10	Biological Psychology (Lecture series, B.Sc. Psychology, with Dr Roman Liepelt)
2009/10	Biological Psychology (Laboratory courses, B.Sc. Psychology, with Dr Roman Liepelt)

## Supervision, Co-Supervision, Mentoring

---

### Supervision of Post-docs

- 2018- Sven Paßmann [Temporal and functional dynamics of prosody perception]  
2014- Mauricio J. Martins [Neural bases of motor hierarchies]

### Supervision of PhD students

- 2018- Katarzyna Gugnowska, [Neural bases of interpersonal coordinated behaviour during music performance]  
2017- Natalie Kohler, [Neural bases of joint music production]  
2016- Pei-Ju Chien, [Neural segregation and integration of intonation and lexical tone: A cross-cultural approach]  
2013- Nele Hellbernd, [Neural bases of prosodically coded intentions]  
2017-2018 Maria Dotzer, [Temporal and functional dynamics of prosody perception] – career change  
2012-2017 Roberta Bianco, [Principles of action planning in music production: Evidence from fMRI and EEG studies in professional pianists] – defended 2017, University of Leipzig (magna cum laude)

### Co-Supervision of PhD students

- 2010- Maria Felber, [Prosody and music]  
2010-2016 Eleanor Elizabeth Harding, [Neurocognitive entrainment to meter influences syntactic comprehension in music and language: An individual-differences approach] – defended 2016, University of Potsdam (summa cum laude)  
2010-2015 Irene Alonso Fernández, [The role of the medial temporal lobe in binding lyrics and melodies: A neuropsychological and neuroimaging approach] – defended 2015, Université Lille Nord-de France, France  
2009-2012 Julia Merrill (née Groh), [Song and speech perception: Evidence from fMRI, lesion studies and musical disorder] – defended 2012, University of Leipzig (summa cum laude)

### Co-Supervision of State Examination

- 2018 Sebastian Jung, Lehramt Musik, Hochschule für Musik und Theater Leipzig, Deutschland [Bewältigung der Komplexität in musikalischen Lernprozessen]  
2018 Martin Schönfelder, Lehramt Musik, Hochschule für Musik und Theater Leipzig, Deutschland [Rolle der funktionalen Orientierung musikalischer Übmethoden]  
2018 Julia Schönfelder, Lehramt Musik, Hochschule für Musik und Theater Leipzig, Deutschland [Motivationspsychologische Aspekte musikalischen Übens]  
2018 Georg Postulka, Lehramt Musik, Hochschule für Musik und Theater Leipzig, Deutschland [Automatisierungsprozesse beim Erlernen von Musizierbewegungen]

### Supervision of Diploma and Master's students

- expected 2018 Yvonne Kiesel, M.Sc. Psychologie, TU Dresden, Germany [The influence of musical training and cultural immersion on cross-cultural prosody perception]  
expected 2018 Katharina Roscher, M.Sc. Psychologie, University of Regensburg, Germany [Die Rolle von motorischem und sensorischem Priming beim Klavierspiel : Ein Verhaltensexperiment]  
expected 2018 Jasper Pöhls, M.Sc. Psychologie, Martin Luther University Halle-Wittenberg, Germany [The role of IFG in syntax processing during music performance: A tDCS study]  
2018 Eléa Dheilily, M.Sc. in Life Sciences and Technology, EPFL – École Polytechnique Fédérale de Lausanne, Switzerland [The causal role of right posterior superior temporal sulcus in prosody perception: a combined TMS-fMRI study]

- 2018 Elisabeth Schneider, M.Sc. Psychology, Martin Luther University Halle-Wittenberg, Germany  
[Stufen der Handlungsplanung: Eine EEG-Studie mit Pianisten]
- 2017 Gisela Govaart, M.Sc. Psychology, University of Amsterdam, The Netherlands  
[Syntax in musical action: EEG evidence for syntax processing during music production and observation in pianists]
- 2017 Felix Haiduk, M.Sc. Psychology, University of Leipzig, Germany  
[The Singer's Formant as an evolved mating signal reflected by MMN]
- 2016 Natalie Kohler, M.Sc. in Music, Mind, and Brain, Goldsmiths, University of London, UK  
[It' all about the timing: Investigating the temporal nature of interaction between melodic pitch and linguistic prosodic expectancy]
- 2015 Nico Benz, M.A. Linguistics, University of Leipzig, Germany  
[Reanalyse bei der Verarbeitung hierarchischer Strukturen]
- 2011 Katharina Fath, Diploma in Psychology, Eberhard Karls University Tübingen, Germany [Der Einfluss von harmonischen Verletzungen auf die Vorhersage von motorischen Reizen]
- 2011 Katrin Cunitz, Diploma in Psychology, University Bremen, Germany  
[Die funktionelle Rolle des Fasciculus arcuatus: Zwei Einzelfallstudien mit Patienten]
- 2010 Eleanor Harding, M.Sc. Clinical Linguistics, University Potsdam, Germany  
[Neural correlates of music and action: An electrophysiological and behavioral study]
- 2004 Lena Nowicki, Diploma in Biology, University of Leipzig, Germany  
[Psychophysiological correlates of emotions elicited by nonhuman sounds]

### Supervision of Bachelor's students

- 2018 Hanna Ringer, B.Sc. Psychology, University of Leipzig, Germany  
[Structural connectivity for syntax-based planning of musical actions]
- 2018 Annika Just, B.Sc. Psychology, University of Leipzig, Germany  
[Intentional prosody in German and Mandarin Chinese]
- 2017 Marie Salditt, B.Sc. Psychology, University of Leipzig, Germany  
[Conveying and recognizing intentions from prosody – A comparison between a group of non-actors and actors]
- 2017 Hanna Susanna Bethcke, B.Sc. Psychology, University of Leipzig, Germany  
[Implizite Wahrnehmung prosodisch kodierter Intentionen]
- 2017 Susan Kang, B.Sc. Cognitive Science, University of Osnabrück, Germany  
[Cross-modal syntax processing during piano playing]
- 2016 Jannis Steininger, B.Sc. Psychology, University of Leipzig, Germany  
[Prosodische Äußerung von Intentionen: Ein Vergleich zwischen Schauspielern und Nicht-Schauspielern]
- 2016 Elias Matin, B.Sc. Psychology, University of Leipzig, Germany  
[Prosodiewahrnehmung im prämotorischen Kortex: Etablierung eines Paradigmas für TMS]
- 2011 Tobias Ay, B.Sc. Psychology, Martin Luther University Halle-Wittenberg, Germany  
[Kann Musik semantische Information vermitteln? Verhaltensexperiment zum semantischen Priming]

### Interns

- 2018 Anna Czepiel (University of Jyväskylä, Finland)
- 2018 Ayaka Tsuchiya (University of Bonn, Germany)
- 2017 Tobias Struck (University of Leipzig, Germany)
- 2017 Hanna Ringer (University of Leipzig, Germany)

2017	Elisabeth Scheider (Martin Luther University Halle-Wittenberg, Halle, Germany)
2017	Gisela Govaart (University of Amsterdam, The Netherlands)
2017	Wy Ming Lin (Wesleyan University, USA, Congress Bundestag Youth Exchange)
2017	Hanna Bethcke (University of Leipzig, Germany)
2016	Natalie Kohler (Goldsmiths University of London, UK)
2016	Jannis Starzinski (University of Leipzig, Germany)
2016	Jannis Steininger (University of Leipzig, Germany)
2015	Elias Matin (University of Leipzig, Germany)
2014	Corinna Eidner (Christliches Gymnasium Jena, Germany)
2014	Jessica Jiesi Zhao (Wilhelm Ostwald Gymnasium, Leipzig, Germany)
2014	İpek Pınar Bekâr (Ankara University, Turkey)
2013	Florian Scharf (University of Leipzig, Germany)
2012	Roberta Bianco (University of Milan, Italy)
2011	Sophie-Marie Raeder (McGill University, Montréal, Canada)
2011	Katharina Fath (Eberhard Karls University Tübingen, Germany)
2010	Irene Alonso Fernández (University of Oviedo, Spain)
2010	Tobias Ay (Martin Luther University Halle-Wittenberg, Halle, Germany)
2010	Johanna Reichert (Julius Maximilian University Würzburg, Germany)
2009	Eleanor Harding (University of Potsdam, Germany)
2009	Katrin Cunitz (University of Bremen, Germany)

#### **Student assistants**

2018-	Hanna Ringer (University of Leipzig, Germany)
2016-2018	Annika Just (University of Leipzig, Germany)
2015-2016	Jasper Pöhls (Martin Luther University Halle-Wittenberg, Germany)
2014-2015	Florian Scharf (University of Leipzig, Germany)
2011-2012	Anne Wagner (University of Leipzig, Germany)
2009-2011	Katrin Cunitz (University of Bremen, Germany)