

CENTRE FOR SYSTEMATIC MUSICOLOGY

The how and why of music



ANNUAL REPORT 2021

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UNIVERSITÄT GRAZ
UNIVERSITY OF GRAZ



Karl-Franzens-Universität Graz
Geisteswissenschaftliche
Fakultät



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Abbreviations

AD(H)D	Attention deficit (hyperactivity) disorder
ESCOM	European Society for the Cognitive Sciences of Music
FWF	Fonds zur Förderung der wissenschaftlichen Forschung, Austria
ICMPC	International Conference on Music Perception and Cognition
JIMS	Journal of Interdisciplinary Music Studies
KUG	Kunstuniversität Graz (University of Music and Performing Arts in Graz)
MdW	Universität für Musik und darstellende Kunst (Vienna)
ÖAW	Österreichische Akademie der Wissenschaften
ÖGMW	Österreichische Gesellschaft für Musikwissenschaft
SysMus	International Conference of Students of Systematic Musicology
Uni Graz	Karl-Franzens-Universität Graz
<i>UniZeit</i>	Uni Graz research magazine

INTRODUCTION

This was our first year in a beautiful old building with high ceilings at Glacisstr. 27. We enjoyed being close to a spacious green park with a fountain (Stadtpark) and the restaurants in Zinzendorfgasse, with the main campus of Uni Graz not far away. Although the Covid epidemic prevented us from travelling to the usual international research meetings, we continued to contribute visibly to international research, both within and between disciplines such as music, psychology, neurosciences, information sciences, philosophy, anthropology, education, medicine, and therapy.

Research staff

Richard Parncutt submitted three book proposals to major publishers. They address music theory and the perception of musical structure; preverbal development and the origin of music and religion; and climate change and human rights. It's a long process, but preliminary signs are promising. He successfully applied for a second habilitation in music psychology at Uni Klagenfurt and published a collection of strategies to improve the performance of Uni Graz in international university rankings. As chair of the ICMPC Executive Committee, and in collaboration with current and previous conference organizers and society presidents, he negotiated a new mission statement that emphasizes inclusivity and sustainability in a way that could transform the future of the series.

Annemarie Seither-Preisler analyzed and presented longitudinal data from two previous collaborative research projects: "AMseL: Audio- and neuroplasticity of musical learning" and the Heisenberg research program "Sound perception between outstanding musical abilities and auditory dysfunction" (2009-2021). The work was presented in a symposium that she was invited to organize at the conference "Neurosciences and Music VII: Connecting with music across the lifespan" in Aarhus (Denmark). She also submitted a stand-alone FWF-project entitled "Neural predictors of dyslexia, AD(H)D, and autism spectrum disorder in the auditory brain and influence of auditory training on brain and behavior in children" (total applied for: approx. €600K). The project will continue and extend her neuro-auditory research on developmental disorders in young people (including autism) and enable new neurologically-based diagnoses as well as empirical evaluation of auditory training programs that she is currently developing for the clinical groups in collaboration with Peter Schneider and Bettina Zeidler. The project's interdisciplinary team represents musicology, neuroscience, psychology, linguistics, and audio-engineering.

Andrea Schiavio was offered a lectureship at the Department of Music, University of York, UK. He will move there with his family in summer 2022. He was also elected president of ESCOM and vice-president of the Society for Interdisciplinary Musicology. His FWF-funded stand-alone project "Together in music: Creative tools for performance, education, and composition" enabled him to continue exploring how expert and novice musicians develop their creative skills. He submitted the final proofs for a co-authored monograph entitled *Musical Minds, Musical Bodies* to MIT Press. As founder and co-editor of the book series *Music as Art and Science* (Oxford University Press), he contributed to new editorial projects on music and philosophy, music and neuroscience, and music and biology. He was external

examiner for a doctoral candidate at Uni Lund (Sweden) and became an associate editor for *Frontiers in Psychology* (performance science).

Bernd Brabec de Mori was offered a tenure-track position in the Department of Musicology, Uni Innsbruck, which he accepted in October; his position in Graz is now being re-advertized. Prior to that, and apart from his continuing research projects, he designed a museum exhibition multimedia installation in cooperation with the Ethnological Museum in the Humboldt-Forum Berlin and Hochschule Luzern, including interactive video projections and a four-channel multilingual audio installation about Amazonian narratives and histories arranged for children and youths. A board member of the ÖGMW, he organized the society's annual meeting for 2020/2021 at the centre (online). He taught in Graz, Marburg and Vienna, and supervised students at Uni Vienna.

Peter Schneider joined the centre as an academic staff member in 2021. A Heisenberg fellow, physicist, church musician, and certified hearing therapist, he founded the Music and Brain research group (musicandbrain.de/team). In 2021, he founded a listening training centre, Hörakademie Heidelberg, based on neuroanatomical, neurophysiological, and psychoacoustic research from his Heisenberg project entitled "Sound perception between outstanding musical abilities and auditory dysfunction: The neural basis of individual predisposition, maturation, and learning-induced plasticity in a lifespan perspective" (2016-2021). In winter semester 2021/22, he is guest lecturer at the Jazeps Vitols Latvian Academy of Music in Riga.

Markus Christiner joined the centre in Graz in 2021. His research addresses language aptitude and the musicality of languages. Previously a member of Music and Brain in Heidelberg and a Doc Team fellow of ÖAW, he applied in 2021 for an ÖAW-APART fellowship entitled "Crossing borders: Examining individual differences in the melodic perception of dialects and languages – A journey from musicology and (socio-)linguistics to neurophysiology", to be realized at the centre and the Music Academy in Riga.

Music and neuroscience

The Music and Brain research group (musicandbrain.de) was founded in 2009 in the Department of Neurology, Heidelberg University Hospital (Universitätsklinikum), where it collaborated with Uni Graz, Basel Music Academy, Music Academy Riga, and Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig. Early in 2021, the group became part of our centre in Graz. Seither-Preisler, Schneider, Christiner, Zeidler, and cooperation partners are studying long-term effects of early musical training on brain and behavior in children and adolescents with and without learning deficits (AD(H)D, dyslexia, autism spectrum disorder) as well as neural correlates of sound and music perception in adult musicians. The group is contributing to "Brain and Behavior", an open research network and profile-building field of excellence at Uni Graz.

Doctoral students

Adrian Kempf has a background in music performance, philosophy, engineering, and cognitive science. He is studying the creative production of rhythmic patterns and the social context of such creative processes within his PhD project with the working title "Rhythmic creativity in music", financially supported by an FWF Stand Alone Project ("Together in

Music”). He was a member of the review committee for the SysMus14 conference (2021 November 3-5, Aarhus, Denmark), and participated in the ESCOM Cross-European Winter School on Musical Ability (2021 February 1-5).

Anita Taschler studied systematic musicology in Graz and music management in Krems. Her doctoral project addresses musical ecstasy and trance in an intercultural and interdisciplinary context and including its healing potential. During 2021, she began to establish a network of experts in the field of music therapy and music ethnology for qualitative interviews and attended courses on this topic. Her research was discussed on Austrian Radio (Ö1).

Siavosh Banihashemi joined the centre as a doctoral student in 2021. He previously studied Komposition (BA), Komposition/Musiktheater (MA), and Komposition/Computermusik (MA) at Institut für Elektronische Musik und Akustik, KUG. He was also a doctoral student at Institut für musikalische Akustik - Wiener Klangstil, MdW, supervised by Wilfried Kausel and Gianpaolo Evangelista. He is now continuing his doctorate in the centre, with empirical research on the perception of changes in frequency, sound pressure level, timing, and spectral envelope in complex musical signals.

Sabrina Sattmann is head of a music school, flutist, and instrumental teacher. She holds bachelor’s and master’s degrees in both psychology and musicology and previously worked for the centre as a project assistant and co-organizer of ICMPC15/ESCOM10. Her empirical work has addressed music and emotion, music rehearsals and well-being, music pedagogy, pitch perception, and health psychology. Her doctoral project is investigating musical chills, emotion, and the role of empathy and personality. In 2021, she was interviewed by *UniZeit* about her doctoral research.

Bettina Zeidler is a systematic musicologist from the Music and Brain research group in Heidelberg, where she contributed to long-term neurological and psychoacoustic studies of effects of musical practice on brain and behavior in children and adolescents. In 2021, she moved to Graz to write her doctoral thesis. She will investigate the auditory profiles of children with autism and the possible benefits of individualized listening training (AULOS = Active individualized Listening OptimizationS) developed by Schneider and cooperation Partner Valdis Bernhofs (Vice-Rector of Music Academy Riga).

Student assistants

Elisabeth Felber joined us in October, supporting the teaching and research of Parncutt. The research involved music theory, music notation (piano tablature), and music education.

Lukas Kummer supported Seither-Preisler with projects on autism spectrum disorder from 2019 to 2021 (June). His master's thesis in psychology is entitled *The role of psychological empowerment in predicting environmentally conscious behavioural intentions*.

Lazar Radovanovic carried out a statistical study of chord voicings relative to their predicted or conventional roots in publicly available jazz arrangements (MIDI files), together with Parncutt. He also wrote an app to transcribe MIDI files of piano music into a keyboard tablature

called Keyboard Trigram, in preparation for a qualitative research project to monitor the progress of amateur pianists reading keyboard tablature.

Theresa Schallmoser is editorial assistant for *JIMS*. An issue entitled *Embodiment in music* was published in 2021 (with publication date 2020), and a new issue entitled *Meaning in music* is in preparation. She also managed the membership of the Society for Interdisciplinary Musicology. Her BSc thesis in psychology is entitled *Health-Promoting Leadership and Detachment at Home Office*. She also worked for the Psychology Department on an international survey of attitudes to tests and testing of psychologists (initiated by the European Federation of Psychologists' Associations).

Noemi Silvestri was student assistant from 2019 to 2021 (February). In her master's project in ethnomusicology (supervised by Sarah Weiss, Ethnomusicology, KUG), she is studying contemporary music in Serbia, Croatia, and neighboring countries (Narodnjaci, turbo-folk).

Evelyn Zimmel provided administrative support for research and teaching, including the Musikologie program, our library, equipment, and finances. She programmed psychological experiments in PsychoPy, and helped Brabec organize the ÖGMw annual meeting. As a student in the MSc program in psychology, she is investigating the effect of song lyrics on emotion in fear-provoking situations.

Impact of centre research

In recent years, the position of Uni Graz in international rankings has steadily deteriorated. That may have created a vicious cycle: the ratings give a poor impression to leading researchers and students who are considering coming to Graz, which causes them to change their mind, and the ratings deteriorate further. To reverse this trend, we need to recognize and understand the relevant causes and processes, and actively promote realistic solutions.

Parncutt recently addressed this issue in detail an article in the German legal journal *Hochschulrecht*. In a nutshell, university staff should pro-actively lead international discussions within specialist disciplines, constructively and courageously addressing problems that international colleagues regard as important, and writing original, surprising, challenging, and foundational contributions that are then frequently cited in the academic literature.

Our centre has been aspiring to goals of that kind since its foundation in 2009. While we have not always succeeded, several of our achievements are noteworthy. For example:

The following contribution is one of the few most-read recent articles in the ESCOM journal *Musicae Scientiae*:

Schiavio, A., Biasutti, M., van der Schyff, D., & Parncutt, R. (2020). A matter of presence: A qualitative study on teaching individual and collective music classes. *Musicae Scientiae*, 24(3), 356-376.

The following *Frontiers* paper has been viewed more often than 99% of all *Frontiers* papers:

Parncutt, R. (2019). The human cost of anthropogenic global warming: Semi-quantitative prediction and the 1,000-Tonne rule. *Frontiers in Psychology*, 10, 2323.

In 2020, Andrea Schiavio, Jonna Vuoskoski (Oslo) and Richard Parncutt signed a contract with Oxford University Press for a book series entitled *Music as Art and Science*. The series will further strengthen Graz's international reputation for music research. In 2021, a contract was signed for the first book in the series (*Interdisciplinary insights into philosophy and music*, ed. Nanette Nielsen) and several others are in planning.

Every day, somewhere in the world, the work of the centre is cited. Total citations by present and past centre members (according to Google Scholar in January 2022) are: Richard Parncutt, 5446; Werner Goebel, 2780; Peter Schneider, 2146; Erica Bisesi, 1672; Annemarie Seither-Preisler, 1502; Andrea Schiavio, 1122; Manuela Marin, 888; Bernd Brabec der Mori, 675; Markus Christiner, 247; Bryoni Buck, 140; Sabrina Turker, 71; Martine Koegeler-Abdi, 56; Nils Meyer-Kahlen, 52; Karim Weth, 39.

Citation statistics are to be taken with a grain of salt. Work of older colleagues is cited more often than younger, papers in English more often than German, papers in the sciences more often than humanities. Sometimes, excellent work is seldom cited, or not cited until decades later. Citation rates are nevertheless important insofar as they contribute directly to a university's international reputation and the international rankings.

We would like to take this opportunity to thank everyone who contributed to the continued success of the centre in 2021, whether or not their contributions are mentioned in the following pages.



STAFF

Director / Professor

Richard Parncutt



Associate Professor

Annemarie Seither-Preisler

Senior Researchers

Bernd Brabec de Mori

Andrea Schiavio (FWF)

Peter Schneider (Heisenberg)



Postdoc Researcher

Markus Christiner



Doctoral students

Adrian Kempf

Sabrina Sattmann

Anita Taschler

Bettina Zeidler



Student Assistants

Lukas Kummer

Lazar Radovanovic

Theresa Schallmoser

Noemi Silvestri

Elisabeth Felber



Office Manager

Evelyn Zimmel



Advisory Board

Andreas Dorschel, Department of Music Aesthetics, KUG

Gerhard Eckel, Department of Electronic Music and Acoustics, KUG

Andreas Schwerdtfeger, Department of Psychology, Uni Graz

FUNDED RESEARCH PROJECTS

Schneider, P., Seither-Preisler, A. “Plasticity of the neuro-auditory network in musically trained adolescents”. Granted to P. Schneider and collaboration partners by German Science Foundation (DFG) (February 2016 – January 2021; €681k).

Schneider, P., Seither-Preisler, A. “Sound perception between outstanding musical abilities and auditory dysfunction: The neural basis of individual predisposition, maturation, and learning-induced plasticity in a lifespan perspective”. Heisenberg fellowship program granted to P. Schneider and collaboration partners by German Science Foundation (DFG) (February 2016 – January 2021; €448k).

Schiavio, A. Full-time position as principle investigator in FWF-stand-alone project “Together in Music: Creative tools for performance, education, and composition” (October 2019 – September 2023; €441k).

Brabec de Mori, B. Co-investigator, ITC project at Hochschule Luzern, “Sounding Amazonia in Museums” (December 2020 – June 2022, funded by Humboldt-Forum, Staatliche Museen Berlin and Hochschule Luzern).

EXTERNAL RESEARCH COLLABORATION

Parncutt

Helena Dukic (former doctoral student, Zagreb). Submission of project entitled “TRUStworthy artificial intElligence (AI) tool to predict the risk of neurological Disorder in fetus and its progression (TRUEAID)” within destination 1 “Staying healthy in a rapidly changing society” of HORIZON-HLTH-2022-STAYHLTH-01-04-two-stage (“Trustworthy artificial intelligence (AI) tools to predict the risk of chronic non-communicable diseases and/or their progression”). Participant institutions: University of Sarajevo, First Faculty of Medicine (Charles University, Prague), University Medical Centre Maribor, Clinical Hospital Centre Zagreb, Alexandra Maternity Hospital (University of Athens), Centre for Ultrasound and Prenatal Medicine Frankfurt, Verlab Ltd., Biosense, and Music Academy Zagreb.

Seither-Preisler

Sabrina Turker (former doctoral student; currently Humboldt Fellow at Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig) and *Susanne Reiterer* (professor at Centre for Language Learning and Teaching Research, Uni Vienna): Shared publications on the comparative neural processing of language and music.

Bernd Laback and *Martin Lindenbeck* (Auditory Research Institute, ÖAW): Development of psychoacoustic test AmbiQ to study subjective pitch perception and individual auditory profiles in normal hearing and hearing-impaired subjects based on the Pitch Perception Preference Test of Schneider et al. (*Nature Neuroscience*, 2005) and the Auditory Ambiguity Test of Seither-Preisler et al. (*JEP: HPP*, 2007).

Valdis Bernhofs (Vice-Rector, Music Academy Riga) and *Tine Groß* (Uni Hamburg, Germany): Research exchange in preparation for FWF-research project.

Schiavio

Mathias Benedek (psychologist, Uni Graz): Coordinated research and experimental work on musical creativity for Schiavio's FWF project.

Michele Biasutti (music psychologist and educator, Uni Padua): Co-designed and performed several qualitative studies on musical creativity and skill acquisition.

Luc Nijs (music educator, Uni Ghent): Co-developed a creativity-based clarinet course for beginners (delivered remotely), to be documented in novel joint publications.

Tudor Popescu (music psychologist and neuroscientist, Uni Vienna). Co-designed several new empirical studies and co-organized an online symposium.

Renee Timmers (music psychologist, Uni Sheffield). Published joint paper in *Scientific Reports* and worked on a follow-up study for 2022.

Jan Stupacher (music psychologist, Uni Aarhus): Published joint paper in *Scientific Reports* and worked on a follow-up study for 2022.

Dylan van der Schyff (music educator, Uni Melbourne): Collaboration on a series of joint publications including monograph for MIT Press and edited collection for *Frontiers*.

Brabec de Mori

Matthias Lewy (music anthropologist, Hochschule Luzern): Joint research in indigenous post-colonial social systems and music in contemporary ritual; sound installations in museums, and co-PIs in "Sounding Amazonia in Museums" project.

Jean-Michel Jarre (musician, composer, Paris): Installation/soundtrack for the photo exhibition "Amazon" with pictures by Sebastiao Salgado, Cité de la musique, Paris; including a LP/CD project published on Sony records.

Katharina Köller (author and actress, Vienna): Dramaturgy and text development for the interactive and multilingual sound stories installed at Humboldt-Forum Berlin.

Clemens Gütl (anthropologist, ÖAW): Sound installation for the exhibition "Aufbruch in die Ferne", Niederösterreichische Landessaustellung 2021, Schallaburg.

VISITORS TO THE CENTRE

In summer, Dr. **Luc Nijs** visited the centre for 3 months to work with **Schiavio** on the development and delivery of a new clarinet course for beginners, and the role of creativity and movement in instrumental music education.

From April 1 to May 31, **Ana Carolina Rodríguez Alza**, of the Pontificia Universidad Católica del Perú, visited the centre as a Coimbra Group Research Fellow to work with **Brabec de Mori** on the music of the Iskonawa Indigenous People (Western Amazon lowlands).

MEMBERSHIP OF COMMITTEES

Parncutt

- Editor of *JIMS*
- Vice-chair, Interuniversity Curriculum Committee “Musikologie” in Graz
- Member (Ex-President), ESCOM Council
- Member, habilitation committee for Saskia Jaszoltowski “Filmmusik im Diskurs des Posthumanen: Hildur Guðnadóttirs Kompositionen für Joker und Chernobyl”, Uni Graz
- Member, habilitation committee for Cristina Scuderi “Cäcilianismus und Regulierung des geistlichen Musikrepertoires in Italien: Disziplinierung oder Zensur?”, Uni Graz

Seither-Preisler

- Network member of INGE St. (Initiative Gehirnforschung Steiermark)
- Full member of BioTechMed network Graz (MedUni, KFU, TU)

Schiavio

- ESCOM President
- Vice-President of Society for Interdisciplinary Musicology
- ICMPC advisory board member
- Co-Editor of the book series *Music as Art and Science* (Oxford University Press)
- Associate Editor of *Frontiers in Psychology* (Performance Science)
- Associate Editor of *JIMS*
- Consulting Editor of *Musicae Scientiae*
- Associate Editor of *Journal of Creative Music Systems*

Brabec de Mori

- Board member of ÖGMW
- Board member, Austrian National Committee, International Council for Traditional Music
- Assistant editor, *El oído pensante*
- Board member for research project reviews, *Pontificia Universidad Católica del Perú*, Lima
- Board member, *Creative (Mis)understandings*: Artistic research collaboration, Taiwan and Austria (MdW Vienna), funded by FWF-PEEK = Programm zur Entwicklung und Erschließung der Künste
- Board member, *Seeking Birdscapes*: Research project at Hochschule Luzern, co-funded by Humboldt-Forum Berlin and Hochschule Luzern
- Review board member for *JIMS*
- Guest editor of *Musicologica Austriaca* (for 2022 special issue)

- Member of the European Association of Social Anthropologists (EASA), Arbeitsgemeinschaft Ethnomedizin (AGEM), Society for the Anthropology of Lowland South America (SALSA), Lateinamerika-Forschung Österreich (LAF-Austria)

PUBLICATIONS

Monographs

Parncutt, R. (in preparation). *Psychoacoustic foundations of major-minor tonality*. Submitted to MIT Press.

Parncutt, R. (in preparation). *Music, religion, and preverbal development: A theory of human origins*. Submitted to Oxford University Press.

Parncutt, R. (in preparation). *CO₂ kills: Global warming and human rights*. Submitted to Bristol University Press.

Parncutt, R. (2021). *A psychoacoustical investigation of sonority and tonality in music*. Habilitationsschrift, Uni Klagenfurt. Examined by Carol Krumhansl, Barbara Tillmann, and Henkjan Honing.

van der Schyff, D., **Schiavio, A.**, & Elliott, D. (in press). *Musical bodies, musical minds. Enactive cognitive science and the meaning of human musicality*. MIT Press.

Edited collections

Camp, M.-A., **Brabec de Mori, B.**, & Klebe, D. (Eds., accepted). *Autoritätsbildungen in der Musik* [Constructions of authority in music]. Zürich: Chronos.

Schiavio, A., Bashwiler, D.M., & Jung, R.E. (Eds., in press). *What is musical creativity? Interdisciplinary dialogues and approaches*. Frontiers Media.

Schiavio, A., Nijs, L., van der Schyff, D., & Juntonen, M.-L. (Eds., 2021). *Towards a meaningful instrumental music education. Methods, perspectives, and challenges*. Frontiers Media.

Journal articles

Biasutti, M., Antonini Philippe, R., & **Schiavio, A.** (online first). Assessing teachers' perspectives on giving music lessons remotely during the COVID-19 lockdown period. *Musicae Scientiae*, doi: 10.1177/1029864921996033.

Brabec de Mori, B. (2021). The power of social attribution: Perspectives on the healing efficacy of ayahuasca. *Frontiers in Psychology: Social and Personality Psychology*, 12, 748131.

Christiner, M., Gross, C., **Seither-Preisler, A.**, & **Schneider, P.** (2021). The melody of speech: What the melodic perception of speech reveals about language performance and musical abilities. *Languages*, 6(3), 132-150.

- Dukic, H., **Parncutt, R.**, & Bunt, L. (2021). Narrative archetypes in the imagery of clients in Guided Imagery and music therapy sessions. *Psychology of Music*, 49(2), 287-303.
- Høffding, S., & **Schiavio, A.** (2021). Exploratory expertise and the dual intentionality of music-making. *Phenomenology and the Cognitive Sciences*, 20, 811–829.
- Maghsadghagh, S., da Rocha, J. L. D., Benner, J., **Schneider, P.**, Golestani, N., & Behjat, H. (2021). A discriminative characterization of Heschl's gyrus morphology using spectral graph features. *bioRxiv*. doi: 10.1101/2021.05.04.442618.
- Parncutt, R.** (2021, in press). Uni Graz and the university rankings: Reform proposals and long-term strategies. *Hochschulrecht*, 2/2021, 186-232.
- Parncutt, R.**, & **Radovanovic, L.** (online first). The missing fundamentals of harmonic theory: Chord roots and their ambiguity in arrangements of jazz standards. *Musicae Scientiae*. doi: 10.1177/10298649211062934.
- Parncutt, R.**, & **Reisinger, D.** (2021). Octave-generalized analysis of chord progressions: Diatonic/fifth relations, missing fundamentals, completion tones. *Journal of New Music Research*, 50(1), 52-73.
- Parncutt, R.**, Lindborg, P., **Meyer-Kahlen, N.**, & Timmers, R. (2021). The multi-hub academic conference: Global, inclusive, culturally diverse, creative, sustainable. *Frontiers in Research Metrics and Analytics*, 53.
- Peñalba, A., Martínez-Álvarez, L., & **Schiavio, A.** (2021). The active musical room: Fostering sensorimotor discoveries and musical creativity in toddlers. *Journal of Research in Music Education*, 69(2), 128–151. doi: 10.1177/0022429420953062.
- Schiavio, A.**, Biasutti, M., & Antonini Philippe, R. (2021). Creative pedagogies in the time of pandemic. A case study with conservatory students. *Music Education Research*, 23(2), 167–178.
- Schiavio, A.**, Maes, P.-J., & van der Schyff, D. (online first). The dynamics of musical participation. *Musicae Scientiae*. doi: 10.1177/1029864920988319.
- Schiavio, A.**, Ryan, K., Moran, N., van der Schyff, D., & Gallagher, S. (in press). By myself but not alone. Agency, creativity, and extended musical historicity. *Journal of the Royal Musical Association*.
- Schiavio, A.**, Stupacher, J., Xypolitaki, E., **Parncutt, R.**, & Timmers, R. (2021). Musical novices perform with equal accuracy when learning to drum alone or with a peer. *Scientific Reports*, 11, 12422.
- Turker, S., **Seither-Preisler, A.**, & Reiterer, S. M. (2021). Examining individual differences in language learning: a neurocognitive model of language aptitude. *Neurobiology of Language*, 1-64.

Chapters

Brabec de Mori, B. (in press). How to charge a voice with power? – Transmuting non-human creativity into vocal creations in the Western Amazon. In A. Goletz & E. Halbmayer (Eds.), *Creation and creativity in Indigenous lowland South America*. Oxford: Berghahn.

Brabec de Mori, B. (in press). Academic (in)discipline, research (in)sanity and the conundrum of (Indigenous) timescapes. In P. Burnard et al. (Eds.), *Doing rebellious research*. Leiden: Brill.

Kretz, J., Lin, W.-Y., & **Brabec de Mori, B.** (2021). Creative (mis)understandings: A methodology of inspiration. In A. Huber et al. (Eds.), *Knowing in performing. Artistic research in music and the performing arts* (pp. 112–130). Bielefeld: Transcript.

Parncutt, R., & Goebel, W. (in press). Piano. In G. McPherson (Ed.), *Oxford handbook of music performance* (2nd ed.) (pp. 355-377). Oxford University Press.

Schiavio, A., & Kimmel, M. (2021). The ecological dynamics of musical creativity and skill acquisition. In A. Scarinzi (Ed.), *Meaningful relations: The enactivist making of experiential worlds* (pp. 123–158). Academia-Verlag.

Schiavio, A. (2021). Enhanced learning through joint instrumental music education. In R. Timmers et al. (Eds.), *Together in music: Participation, coordination, and creativity in ensemble* (pp. 255–260). Oxford University Press.

Seither-Preisler, A., & **Schneider, P.** (2021). Positive Effekte des Musizierens auf Wahrnehmung und Kognition aus neurowissenschaftlicher Perspektive. In G. Bernatzky & G. Kreutz (Eds.), *Musik und Medizin* (2nd ed.) (pp. 375-393). Vienna: Springer.

Sommer-Lolei, S., Korecky-Kröll, K., **Christiner, M.,** & Dressler, W. U. (2021). Acquisition and Processing of (mor)phonotactic consonant clusters in German. In W. Dressler et al. (Eds.), *Experimental, acquisitional and corpuslinguistic approaches to the study of morphonotactics* (pp. 77-100). Austrian Academy of Sciences Press.

van der Schyff, D., & **Schiavio, A.** (in press). Musical creativity in performance. In G. McPherson (Ed.), *Oxford Handbook of Musical Performance*. Oxford University Press.

Review

Schiavio, A. (2021). Review of “Enacting musical time. The bodily experience of new music” by Mariusz Kozak. *Music & Science*, 4, 1–3.

Editorial

Schiavio, A., Bashwiler, D.M., & Jung, R.E. (2021). Editorial: What is musical creativity? Interdisciplinary dialogues and approaches. *Frontiers in Psychology: 12*, 796096. doi: 10.3389/fpsyg.2021.796096.

Other

Brabec de Mori, B. (2021). *Urgent action needed: COVID-19 pandemic devastating Amazonia*. chacruna.net.

Parncutt, R., & Seither-Preisler, A. (2021). Live streaming at international academic conferences: Doing rather than talking (Reply to comment). *Elementa: Science of the Anthropocene*, 9 (1), 00435.

Parncutt, R. (in press). The inclusive, sustainable international conference. *Responsible Science* (Scientists for Global Responsibility).

MEDIA CONTRIBUTIONS

Castillo, S. (2021 August 3). Questioning the silver bullet: Critical approaches for the study of ayahwasca. Interview with **Brabec de Mori** and Olivia Marcus. *Religious Studies Project*, religiousstudiesproject.com.

Eklaude, D. (2021 April 1). Herz und Hirn. *UniZeit*, 01/2021, 15-17. Report on research of **Seither-Preisler** and **Schneider**.

Eklaude, D. (2021 April 1). Stimmungsmacher. Warum uns manche Klänge Schauer über den Rücken jagen. *UniZeit*, 01/2021, 17-18. Report on research of **Sattmann**.

Gnaiger, P. (2021 May 15). Gerechtigkeit ist ein Gefühl. *Salzburger Nachrichten*. Report on research of **Brabec de Mori**.

CONFERENCES

Invited presentations

Seither-Preisler, A. (2021 August 24). Behavioral and neurological benefits of musical training on children and adolescents with AD(H)D and dyslexia, *Virtual Meeting of Federation of European Neuroscience Societies; Satellite Symposium “Music and the Brain”*, Krakow, Poland [online meeting].

Seither-Preisler, A. (2021 June 18-21). Behavioral and neurological benefits of musical training on children and adolescents with AD(H)D and dyslexia, *Neurosciences and Music VII*, Mariani Foundation, Aarhus (Denmark).

Schiavio, A. (2021 April 1). A world to share: 4E cognition and ethnomusicology. *Cognitive Ethnomusicology Special Interest Group, Society for Ethnomusicology* [remote].

Schneider, P. (2021 August 24). Effects of musical experience on morphology and network plasticity of the auditory brain in children and adolescents. *Federation of European Neuroscience Societies; Satellite Symposium “Music and the Brain”*, Krakow, Poland [online meeting].

Regular talks

Brabec de Mori, B., & Lewy, M. (2021 November 10). Collaborative restitution, archiving and curating of sound as an agent of knowledge transfer. *International Union of Anthropological and Ethnological Sciences Congress*, Yucatán, Mexico [remote].

Brabec de Mori, B. (2021 November 4). The shaman's drum: Eurocentric interpretations of non-European sound ontologies. *Musik und Medizin. Musikwissenschaftliche und medizinhistorische Zugänge*. Innsbruck, Austria [remote].

Brabec de Mori, B. (2021 June 25). The mythic substance eternally colonial: Distinguishing traits of the ayahuasca healing experience. *XIII Biennial Conference of the Society of the Anthropology of Lowland South America*, Charlottesville, USA [remote].

Brabec de Mori, B. (2021 May 20). Healing in music: The construction of ritual time-space and the emergence of ritual efficacy. *The Healing and Emotional Power of Music and Dance*, Lisbon, Portugal [remote].

Brabec de Mori, B. (2021 April 9). Sounding Indigenous against global ecological crises: A case from the Western Amazon. *Conference of the British Forum for Ethnomusicology*, Bath, UK [remote].

Coumel, M., Gross, C., Sommer-Lolei, S., **Christiner, M.** (2021 November 26-28). Acquiring phonological awareness in a second language: The influence of musical abilities and phonetic aptitude. *15th International Symposium of Cognition, Logic and Communication*, Riga, Latvia [remote].

Christiner, M., & Gross, C. (2021 November 26-28). What musical status reveals about individual differences in the perception and production of foreign languages. *15th International Symposium of Cognition, Logic and Communication*, Riga, Latvia [remote].

Christiner, M., Renner, J., Gross, C., Benner, J., & **Schneider, P.** (2021 November 26-28). Mandarin and Musicality: What elementary auditory skills, musical and singing abilities reveal about learning to discriminate and to pronounce Mandarin. *15th International Symposium of Cognition, Logic and Communication*, Riga, Latvia [remote].

Gross, C., & **Christiner, M.** (2021 November 26-28). Singing behaviour during childhood boosts language abilities during adulthood. *15th International Symposium of Cognition, Logic and Communication*, Riga, Latvia.

Kempf, A., & **Schiavio, A.** (2021 November 2-5). Moving in synchrony with a virtual drummer promotes a feeling of closeness. *SysMus14*, Aarhus, Denmark.

Parncutt, R. (2021 November 25). Mother schema and the proximal stimulus: Why we attend to music, why melodies comprise tones, why rhythmic patterns are repeated. *ÖGMW annual meeting*, Graz, Austria [remote].

Schiavio, A. (2021 October 27-30). Reshaping musical creativity and peer-interaction during the COVID-19 lockdown. *International Symposium on Performance Science*, Montreal, Canada [remote].

Schiavio, A., Stupacher, J., **Parncutt, R.,** & Timmers, R. (2021 July 28-31). Shared responsibilities and participation in musical skill acquisition. Two empirical studies. *ICMPC16-ESCOM11* [remote].

Schneider, P. (2021 June 15). Effects of musical experience on morphology and network plasticity of the auditory brain in children, adolescents and adults. *Music and Brain Plasticity (Koetser Symposium & Award)*, Zürich, Switzerland.

Schneider, P. (2021 June 18-21). Effects of musical experience on morphology and network plasticity of the auditory brain in children and adolescents. *Neurosciences and Music VII*, Mariani Foundation, Aarhus, Denmark.

Schneider, P. (2021 August 9). Individuelle Unterschiede der Klangwahrnehmung und des Hörens im Gehirn von Musikern und Nichtmusikern und das zerebrale Symphonieorchester: Zwischen außergewöhnlichen Hörfähigkeiten und Hördefiziten. *Music Meets Medicine*, Aachen-Kornelimünster, Germany.

Seither-Preisler, A. (2021 December 6). Neuroplastic long-term effects of musical training and short-term effects of active listening training on cortical auditory processing, *INGE St. Network Meeting*, Graz, Austria [remote].

Seither-Preisler, A. (2021 November 27). Effects of musical training on brain and behavior: Findings of the international long-term study AMseL. *ÖGMW Annual Meeting*, Graz, Austria [remote].

Silvestri, N. (2021 November 26). Dominant music and subordinate identities: Towards a feminist and queer reading of Narodnjaci. *ÖGMW Annual Meeting*, Graz, Austria [remote].

Posters

Benner, J., Rus-Oswald, G., Bürki, C., Reinhardt, J., **Christiner, M.,** Hofmann, E., **Schneider, P.,** Stippich, Ch., Kressig, R., & Blatow, M. (2021 June 18-21). The musician's aging brain. Poster at *Neuromusic VII Conference*, Aarhus, Denmark [remote].

Christiner, M., Groß, Ch., Renner, J., Benner, J., **Schneider, P.** (2021 June 18-21). Right-left hemispheric synchronization of the auditory cortex: Examining the relationship between P1 and N1 response differences of unfamiliar speech perception and production. Poster at *Neuromusic VII Conference*, Aarhus, Denmark [remote].

Gross, C., Bernhofs, V., **Christiner, M., & Schneider, P.** (2021 June 18-21). Neural and behavioural correlates of musical perception and performance in children with attention-deficit disorder (ADD), attention-deficit disorder with hyperactivity (ADHD) and dyslexia. Poster at *Neurosciences and Music VII*, Aarhus, Denmark [remote].

Kempf, A., & Schiavio, A. (2021 July). An analysis of eye movements in sight-reading rhythms. Poster at *ICMPC16-ESCOM11* [remote].

Schiavio, A., Stupacher, J., **Parncutt, R.,** & Timmers, R. (2021 June 19-22). Individual and collective technology-aided musical learning: Comparing synchronization, turn-taking, and imitation. Poster at *Neurosciences and Music VII*, Aarhus, Denmark [remote].

Schneider, P., Benner, J., Engelmann D., Bernhofs, V., Gross, C., Serrallach, B., Turker, S., Reiterer, S., **Seither-Preisler, A.** (2021 June 18-21). Effects of musical training on the

morphology and network plasticity of the auditory brain in children and adolescents with either typical development, AD(H)D or dyslexia. Poster at *Neurosciences and Music VII*, Aarhus, Denmark.

Schöllkopf, U., Ludwig, A., **Christiner, M.**, Renner, J., Benner, J., **Schneider, P.** (2021 June 18-21). Auditory-related differences in AD(H)D-subtypes and the influence of music practice. Poster at *Neurosciences and Music VII*, Aarhus, Denmark [remote].

Panel membership

Ambrazevicius, R., Van Handel, L., **Schiavio, A.**, & **Parncutt, R.** (2021 July 28). British-Academy-funded workshop “Job application session on processes across different national contexts”, *ICMPC16-ESCOM11* [remote].

Brabec de Mori, B. (2021 June 7). Panel “Performing Collective Embodiments of Theory/Practice”, *Arts and Creativity Research Group*, London, UK [remote].

Celestini, F., Mautner, G., **Parncutt, R.**, Williams, C. A., & **Brabec de Mori, B.** (2021 November 26). Panel “Interdisciplinarity”, *ÖGMW annual meeting* [remote].

Gruber, C., **Parncutt, R.**, Ressler, O., Strickner, A., & Nowotny, M (2021 October 2). Panel “Neue Allianzen”, Markt der Zukunft: Innovationsfestival für Graz, Alte Universität, Graz.

Schiavio, A., Carreras, V., & MacRitchie, J. (2021 March 18). Panel “performance science”. *Transformation: Plenary day for doctoral students*, Royal College of Music, London, UK [remote].

Proceedings contributions

Brabec de Mori, B. (in press). The construction of efficacy: Musical ritual spaces, times, and beings. In F. Bonini & G. Scalici (Eds.), *The healing and emotional power of music and dance*. Online.

Conference organization

Brabec de Mori, B. (2021, November 25-27). Organizer and chair of *ÖGMW Annual Meeting “Listening - Focusing – Ignoring”*.

Symposium/panel organization

Brabec de Mori, B. (2021 November 27). Organizer of panel “Towards identifying what we hear when we listen to ritual, to birds, or to music” with I. Knoth, M. Lewy, F. Riedel, **A. Seither-Preisler**, H. Simonett, A. Rayzhekov, and V. A. Stoichiță. *ÖGMW Annual Meeting*, Graz, Austria [remote].

Schiavio, A., Antonini Philippe, R., and Biasutti, M. (2021 October 27-30). Organizer of symposium “The impact of Covid-19 on music education and sport”, *International Symposium on Performance Science*, Montreal, Canada [remote].

Schneider, P., Seither–Preisler, A., Altenmüller, E., James, C., Gold, C., Specht, K., Schlaug, G. (2021 June 18-12). Symposium "The impact of long-term music intervention on behavior and brain plasticity over the lifespan in healthy individuals and individuals with ADHD or autism spectrum disorder". *Neurosciences and Music VII*, Aarhus, Denmark.

INVITED TALKS AT EDUCATIONAL INSTITUTIONS

Brabec de Mori, B. (2021 March 31). Indigenous knowledge, sound, healing, sorcery, and phenomenology: A methodology for talking about secrets in music studies. Haute école de musique de Genève–Neuchâtel, Switzerland [remote].

Brabec de Mori, B. (2021 November 20). Micro-phenomenology: Qualitative research methods. Artistic research seminar series, MdW Vienna, Austria.

Brabec de Mori, B. (2021 December 20). Feldforschungen und Resultate: Lieder, Magie und indigenes Wissen. Fachbereich Musikethnologie, Universität Mozarteum Salzburg, Innsbruck, Austria [remote].

Brabec de Mori, B., & Lewy, M. (2021 December 15). Collaborative composing and displaying: Indigenous sounds in European museums. European Lowland South America seminar series, Uni Sussex, UK [remote].

Brabec de Mori, B., Pérez de Arce, J., & Mercado, C. (2021 August 25). La maraka, una tecnología para la comunicación con lo invisible. Lecture Series "Decifrando la música precolumbina", Santiago, Chile [remote].

Kempf, A., (2021 June 11) Moving together to the beat: A path to embodied musical creativity? Institute for Psychoacoustics and Electronic Music, Uni Gent (invited by Luc Nijs) [remote].

Parncutt, R. (2021 May 20). Psychoacoustics of consonance and dissonance in Western music: Smoothness, harmonicity, pitch commonality, prevalence, familiarity. Habilitation presentation, Uni Klagenfurt [remote].

Parncutt, R. (2021 September 9). Evaluating music-origin theories. Department of Music, Art and Culture Studies, Uni Jyväskylä [remote].

Schiavio, A. (2021 January 20). Skill acquisition and interaction in music. Department of Cognitive Sciences, Central European University, Vienna, Austria [remote].

Schiavio, A. (2021 December 10). Musical creativity in theory and practice. Department of Music, Art, and Culture Studies, Uni Jyväskylä, Finland [remote].

SPOKEN PRESENTATIONS AT THE CENTRE

Banihashemi, S. (2021 November). Effect of timing, tuning, and intensity on the perceptual fusion of simultaneous tones.

Beers, J. (MUK Vienna) & Reulecke, I. (HZT Berlin) (2021 March). Empathy in collaborative improvisation.

Brabec de Mori, B. (2021 June). Musical health practices in Amazonia, the Caribbean, and Central European Music Therapy.

Cannon, J. (MIT) (2021 April). The shared predictive roots of motor control and beat-based timing.

Christiner, M. (2021 December). Positive skill transfer from music to language.

Fiveash, A. (Lyon) (2021 May). Rhythm is Multidimensional: Evidence for Separable Components of Rhythmic Abilities.

Jovic, A. (2021 June). A quantitative analysis of the effect of music on physical exercise performance.

Kempf, A. (2021 June). Inspecting the embodied beat from a new angle: Theory and practice.

Kempf, A. (2021 November). Rhythmic creativity in music.

Mehr, S. (Harvard) (2021 May). Universality and diversity in human song.

Nijs, L. (Ghent, B) (2021 April). Developing musicianship: On the role of body movement in instrumental music learning and teaching.

Parncutt, R. (2021 May). Psychoacoustics of consonance and dissonance in Western music: Smoothness, harmonicity, pitch commonality, prevalence, familiarity.

Parncutt, R. (2021 October). Psychoacoustics of consonance and dissonance in Western music.

Proksch, S. (Merced, CA) (2021 June). Coordination dynamics of multi-agent interaction within a musical ensemble.

Rodríguez Alza, C. (guest researcher from Peru) (2021 April). Memory and social distribution of chants among Iskonawa people (Peruvian Amazon).

Sattmann, S. (2021 January). Musical chills: Felt emotions and the role of empathy and personality.

Sattmann, S. (2021 June). Who is getting chills? Individual differences promoting the occurrence of peak experiences in music perception.

Senn, O. (2021 January). Preliminaries to a psychological model of musical groove.

Stupacher, J. (2021 November). Conceptual frameworks for music entrainment.

Taschler, A. (2021 March). Music and altered states of consciousness: The healing potential of peak experiences.

Zeidler, B. (2021 November). Auditory profiles of children with autism spectrum disorder.

DOCTORAL SUPERVISION

Parncutt

1st supervisor:

- Siavosh Banihashemi: “Musical sound and its components”
- Sabrina Sattmann: “Peak experiences in music perception: Chills, emotions, and the role of empathy and personality”
- Anita Taschler: “Musical ecstasy and trance: An intercultural, interdisciplinary approach”
- Bettina Zeidler: “Auditory-musical perceptual profiles of children with autism spectrum disorder and therapeutical implications”

2nd supervisor:

- Adrian Kempf

Seither-Preisler

2nd supervisor: Sabrina Sattmann, Bettina Zeidler, Siavosh Banihashemi

Schiavio

1st supervisor: Adrian Kempf, “Rhythmic creativity in music”

2nd supervisor: Caroline Curwen (Uni Sheffield), “Music-colour synaesthesia: A conceptual correspondence”

Brabec de Mori

2nd supervisor: Ta-Hsin Kuo, Uni Vienna: “Nostalgia and revival of Bolero music: Seeking the soul of Vietnam”

Schneider

1st supervisor:

- Steffen Bücher (Medizinische Fakultät Heidelberg): “Neurophysiological correlates of musical-aesthetic experience“
- Jan Benner (Medizinische Fakultät Heidelberg), “Auditory neuroplasticity in the adult musical brain”
- Inga Conzen (Medizinische Fakultät Heidelberg), “Neuro-auditory profile of singers and its influence on the speaking and singing voice”

2nd supervisor

- Lana Burmistrova (Music Academy Riga), “EEG-Neurofeedback to substantiate criteria of intrinsic motivations to enhance components of musical giftedness”

TEACHING

Summer 2021

Parncutt

- Psychoacoustics and Music Cognition (BA)
- Empirical Music Psychology (BA)
- Developmental Music Psychology (MA)
- Current Musicology (BA & MA)
- Research Supervision (BA & MA)

Seither-Preisler

- Introduction to the Psychology of Music (BA)
- Data Analysis in Music Psychology (BA)

Winter 2021-22

Parncutt

- Introduction to Systematic Musicology (BA)
- Music and Evolution (MA)
- Current Musicology (BA & MA)
- Research Supervision (BA and MA)

Seither-Preisler

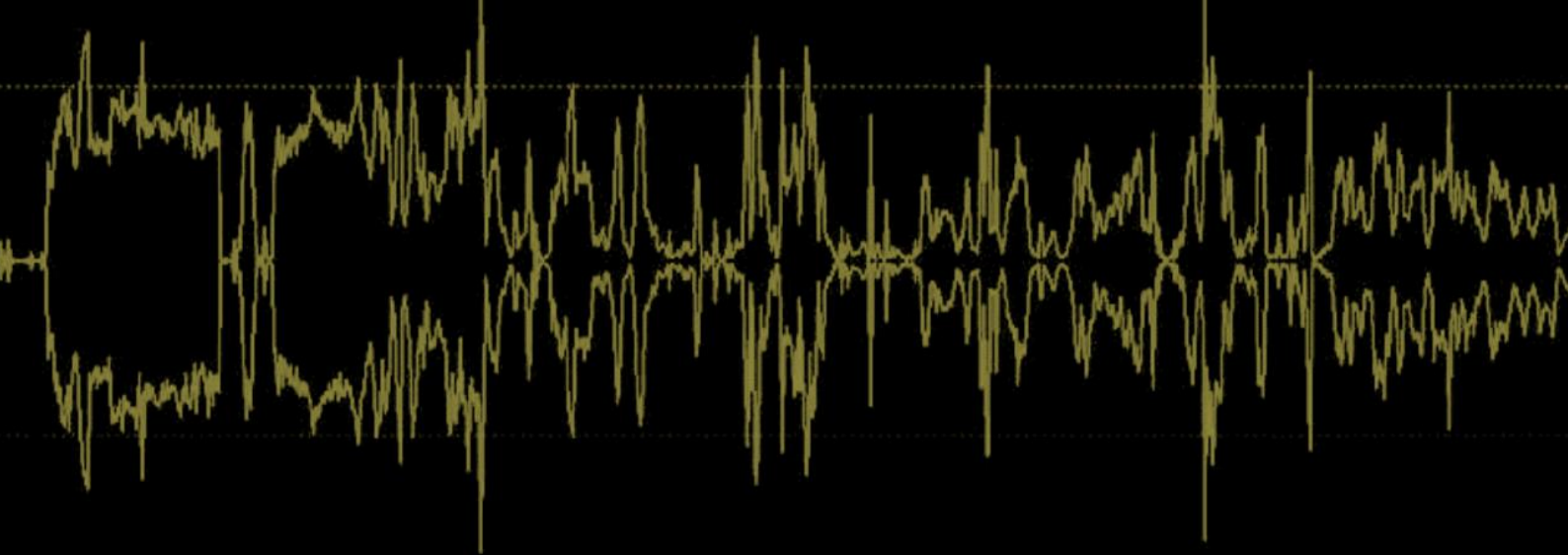
- Seminar in Music Psychology (BA)
- Seminar in Music and Neurosciences (MA)

Schiavio

- Psychology of Music Education (KUG)

Brabec

- Lecture series “Globale Musikkulturen”, Uni Innsbruck
- Proseminar “Globale Musikkulturen: Methoden und Themen”, Uni Innsbruck
- Seminar “Zusammenarbeit und Dekolonialisierung mit Indigenen”, Uni Marburg



Bernd
Brabec de Mori



Elisabeth
Felber



Adrian
Kempf



Richard
Parncutt



Lazar
Radovanovic



Sabrina
Sattmann



Theresa
Schallmoser



Andrea
Schiavio



Annemarie
Seither-Preisler



Anita
Taschler



Bettina
Zeidler



Evelyn
Zimmel