

Fabian C. Moss

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Education

- 2017–2019 **École Polytechnique Fédérale de Lausanne (EPFL)**,
Digital and Cognitive Musicology Lab (DCML), Doctoral Assistant.
- 2015–2017 **Technische Universität Dresden (TUD)**,
Dresden Music Cognition Lab (DMCL), Doctoral Assistant.
- 2011–2013 **Hochschule für Musik und Tanz Köln (HfMT)**,
Musicology, Master of Arts.
- 2008–2013 **Hochschule für Musik und Tanz Köln (HfMT)**,
Music Education, Staatexamen (State Examination).
- 2006–2016 **Universität zu Köln (UK)**,
Mathematics and Educational Sciences, Staatexamen (State Examination).
- 2002–2005 **Friedrich-Wilhelm-Gymnasium Köln (FWG)**,
Abitur.

Theses

PhD

- Title *Transitions of Tonality: A Model-Based Corpus Study* (2013)
- Supervisors Martin Rohrmeier & Markus Neuwirth, DCML, EPFL

Master

- Title *“Theorie der Tonfelder” nach Simon und “Neo-Riemannian Theory”:
Systematik, historische Bezüge und analytische Praxis im Vergleich* (2012)
- Supervisor Hans Neuhoﬀ, HfMT

Publications

- submitted Harasim, D., **Moss, F. C.**, Ramirez, M., & Rohrmeier, M. Cognitive modeling reveals history of major and minor in Western classical music.
- under review **Moss, F. C.**, de Souza, W. F., & Rohrmeier, M. Harmony and Form in Brazilian Choro: A Corpus-Driven Approach to Musical Style Analysis.
- 2019 Popescu, T., Neuser, M. P., Neuwirth, M., Bravo, F., Mende, W., Boneh, O., **Moss, F. C.**, & Rohrmeier, M. (2019). The pleasantness of sensory dissonance is mediated by musical style and expertise. *Scientific Reports*, 9(1), 1070. <https://doi.org/10.1038/s41598-018-35873-8>
- Moss, F. C.**, Neuwirth, M., Harasim, D., & Rohrmeier, M. (2019). Statistical characteristics of tonal harmony: A corpus study of Beethoven’s string quartets. *PLOS ONE*, 14(6), e0217242. <https://doi.org/10.1371/journal.pone.0217242>
- Landnes, K., Mehrabyan, L., Wiklund, V., Lieck, R., **Moss, F. C.**, & Rohrmeier, M. (2019). A Model Comparison for Chord Prediction on the Annotated Beethoven Corpus. In I. Barbancho, L. J. Tardón, A. Peinado, & A. M. Barbancho (Eds.), *Proceedings of the 16th Sound and Music Computing Conference (SMC 2019)* (pp. 250–254). Málaga, Spain.
- 2018 Neuwirth, M., Harasim, D., **Moss, F. C.**, & Rohrmeier, M. (2018). The Annotated Beethoven Corpus (ABC): A Dataset of Harmonic Analyses of All Beethoven String Quartets. *Frontiers in Digital Humanities*, 5(July), 1–5. <https://doi.org/10.3389/fdigh.2018.00016>

- Moss, F. C.**, de Souza, W. F., & Rohrmeier, M.. (2018). Choro Songbook Corpus (Version 1.0) [Data set]. *Zenodo*. <http://doi.org/10.5281/zenodo.1442765>.
- 2017 **Moss, F. C.** (2017). [Review of David Huron. *Voice Leading: The Science behind a Musical Art*]. *Music Theory & Analysis*, 4(1), 1–12. <https://doi.org/https://doi.org/10.11116/MTA.4.1.71>
- 2014 **Moss, F. C.** (2014). Tonality and functional equivalence: A multi-level model for the cognition of triadic progressions in 19th century music. In *International Conference of Students of Systematic Musicology – Proceedings* (pp. 1–8). London. <http://ojs.gold.ac.uk/index.php/sysmus14/article/view/243>

Talks, Conference Presentations, and Posters

- 2019 **Moss, F. C.** *Tracing the History of Tonality with Note Distributions*. “Corpus Research as a Means of Unlocking Musical Grammar” International Research Workshop, July 1–4, 2019, Tel-Aviv, Israel.
- Moss, F. C.** *Inferring Tonality from Note Distributions – Why Models Matter (Poster)*. SEMPRES Graduate Conference 2019, Cambridge, UK.
- Moss, F. C.** *Analyzing Tonality with Note Distributions*. First Swiss Digital Humanities Student Exchange DHX2019, Basel, Switzerland.
- 2018 **Moss, F. C.**, Souza, W. F. & Rohrmeier, M. *Harmony and Form in Brazilian Choro: A Corpus Study*. 15th International Conference on Music Perception and Cognition & 10th triennial conference of the European Society for the Cognitive Sciences of Music, Graz, Austria.
- Aitken, C., O'Donnell, T. & Rohrmeier, M. [Poster presented by **Moss, F. C.**]. *A Maximum Likelihood Model for the Harmonic Analysis of Symbolic Music*. 15th Sound and Music Computing Conference “Sonic Crossings”. Limassol, Cyprus.
- Moss, F. C.** *Corpus Research in Digital Musicology* (Talk and Tutorial). Seminar “Willkommen in der Matrix: Digitale Anwendungen für die Musikanalyse in Theorie und Praxis”, University of Basel, Basel, Switzerland.
- Harasim, D., **Moss, F. C.** & Ramirez, M. *A Brief History of Tonality* (Poster). Applied Machine Learning Days, EPFL, Switzerland.
- 2017 **Moss, F. C.** *Formal Grammars and Ambiguity in Extended Tonality*. Workshop and Symposium on Schenkerian Analysis “Wege der Kreativität – Zwischen Erfindung und Rekonstruktion”, Universität der Künste, Berlin, Germany.
- Moss, F. C.**, Souza, W. F. & Rohrmeier, M. *Brazilian Choro: A New Data Set of Chord Transcriptions and Analyses of Harmonic and Formal Features*. 17. Jahreskongress der Gesellschaft für Musiktheorie (GMTH) & 27. Arbeitstagung der Gesellschaft für Populärmusikforschung (GfPM) “Populäre Musik und ihre Theorien: Begegnungen – Perspektivwechsel – Transfers”, Graz, Austria.
- Moss, F. C.**, Harasim, D., Neuwirth, M. & Rohrmeier, M. *Beethovens Streichquartette – ein XML-basierter Korpus harmonischer Analysen in einem neuen Annotationssystem*. Jahrestagung der Gesellschaft für Musikforschung, Kassel, Germany.
- Moss, F. C.**, Rohrmeier, M. *Integrating Transformational and Hierarchical Models of Extended Tonality*. 9th European Music Analysis Conference (EuroMAC), Strasbourg, France.
- Rom, U., Jeßulat, A., **Moss, F. C.** & Guter, I. *Ambiguity, Illusion & Timelessness in Late and Post-Tonal Harmony*. Panel discussion at the 9th European Music Analysis Conference (EuroMAC), Strasbourg, France.
- Moss, F. C.** *Musik und Sprache*. Talk for Student Association “Denkzettel”, TUD, Dresden, Germany.
- Moss, F. C.**, Rohrmeier, M. & Bravo, F. *Emotional Associations Evoked by Structural Properties of Musical Scales and Abstract Visual Shapes*. KOSMOS Dialogue “Music, Emotion, and Visual Imagery”, Berlin, Germany.
- Harasim, D., **Moss, F. C.**, Neuwirth, M. & Rohrmeier, M. *Beethoven’s String Quartets: Introducing an XML-Based Corpus of Harmonic Labels Using a New Annotation System*. Music Encoding Conference, Tours, France.

- 2016 **Moss, F. C.** *Extended Tonality: Theoretical Challenges and their Relation to the Neuroscientific Study of Musical Syntax*. Max Planck Institute for Human Cognitive and Brain Sciences, Leipzig, Germany.
- Moss, F. C.**, Rohrmeier, M. *Structural Ambiguities in Language and Music* (Poster). Helsinki Summer School for Cognitive Neuroscience 2016 (HSSCN 2016).
- Moss, F. C.**, Rohrmeier, M. *A grammatical approach to tension-resolution patterns in extended tonal harmony*. Meeting of the Computational Cognitive Science Group, Massachusetts Institute of Technology, Department of Brain and Cognitive Sciences, Cambridge, USA.
- Moss, F. C.**, Rohrmeier, M. *Towards a syntactic account for harmonic sequences in extended tonality*. Syntax Square Meeting, Massachusetts Institute of Technology, Department of Linguistics and Philosophy, Cambridge, USA.
- Moss, F. C.** *Syntax of Extended Tonality: Towards a Grammar of Generalized Harmonic Functions*. Music Theory Colloquium, Boston University, College of Fine Arts, School of Music, Boston, USA.
- Moss, F. C.** *Generalizing Harmonic Functions: A Grammatical Approach to Extended Tonality*. Yale University, Department of Music, New Haven, USA.
- Moss, F. C.** & Harasim, D. *Extended Tonality and Music Cognition*. Symposium "Towards a World Music Theory", University of Hamburg, Institute for Systematic Musicology, Hamburg, Germany.
- Moss, F. C.** *Music Cognition and Extended Tonality: Theoretical Challenges and Empirical Implications*. Research Colloquium, University of Cologne, Cologne, Germany.
- 2015 **Moss, F. C.** *On generative modelling of musical form*. Seminar "Mathematics and Music", TUD, Dresden, Germany.
- Moss, F. C.** *'The terror of sanctity.' Tonal cues for resolving dramatic ambiguities in Wagner's Parsifal*. Seminar "Understanding Musical Structures", TUD, Dresden Germany.
- 2014 **Moss, F. C.** *Tonality and functional equivalence: A multi-level model for the cognition of triadic progressions in 19th century music*. International conference of Students of Systematic Musicology, Goldsmiths University, London, UK.
- Moss, F. C.** *Language, music and the brain: a resource-sharing framework (Patel, 2012)*. Seminar "Cognitive Neuroscience of Music", Institut for Musicology, University of Cologne, Cologne, Germany.

Awards and Scholarships

- 2016–2107 **Konrad Adenauer Foundation**, *PhD Scholarship*.
- Aug 2016 **TUD Graduate Academy**, *Travel Award*.
Summer School in Cognitive Neuroscience of Music, University of Helsinki
- Jan–Mar 2016 **Deutscher Akademischer Austauschdienst (DAAD)**, *great! (group to group exchange for academic talents)*.
Visiting Student at Massachusetts Institute of Technology (MIT), Department of Linguistics and Philosophy.
- Sep 2014 **Society for Education and Music Psychology (SEMPRE)**, *Travel Award*.
International Conference of Students of Systematic Musicology, Goldsmith University, London, UK.
- Jan–Apr 2012 **European Union (EU)**, *ERASMUS Scholarship*.
Exchange semester at Escola Superior de Musica de Catalunya (ESMUC) in Barcelona, Spain.
- 2008–2013 **Konrad Adenauer Foundation**, *Student Scholarship*.

Teaching and Supervision

- 2018 Teaching Assistant, "Digital Musicology" (MSc; tutorials and excercises), EPFL.
Supervision of three MSc student projects for "Machine Learning" course, EPFL.
Supervision of four MSc student projects for "Digital Musicology" course, EPFL.
- 2017 Peer-mentoring visiting PhD student in music theory/composition, TUD.
- 2016–2017 "Reading Class Musicology", (BA; with Christoph Wald), TUD.
- 2015–2016 "Introduction to Musicology", (BA; with Christoph Wald), TUD.

- 2015 Joint supervision of interdisciplinary project of technical design undergraduate.
2013 "Academic Writing and Research Techniques" (MA), HfMT.

Relevant Courses

Workshops and Summer Schools

- 2018 Workshop "Voice-leading schemata in theory, corpus research, and practical composition (Compose your own Chopin!)", EPFL, Switzerland, September 18–20, 2018
Symposium "Archiving Intangible Cultural Heritage & Performing Arts: A Symposium and Summer School for Living Traditions", EPFL, Switzerland, August 6–7, 2018
2017 Workshop "Meaning in Music: Bridging Musicological, Linguistic, and Neuroscientific Perspectives", EPFL, Switzerland, December 4–6, 2017.
Summer School "Exploring Edges: An International Colloquium between the Digital Humanities, Architecture, Artistic Research, and Critical Technical Practice", EPFL, Switzerland, July 11–14, 2017.
2016 Summer School "Cognitive Neuroscience of Music", University of Helsinki, August 11–17, 2016

University Courses

- 2017 "Applied Data Analysis" (Robert West), EPFL.
2016 "Introduction to Schenkerian Theory" (Oliver Schwab-Felisch), TUD; "Cognitive Science" (P. Sinha, J. Tenenbaum, E. Gibson), MIT; "Computational Modeling of Phonology and Morphology" (T. O'Donnell, A. Albright), MIT.
2015 "Generative Modeling" (T. O'Donnell), TUD; "Introduction to Quantitative Methods for the Social Sciences" (TUD Graduate Academy), TUD.
2012-13 "Cognitive Neuroscience of Music", "Cognitive Musicology: Theoretical Foundations", "Cognitive Modeling" (Uwe Seifert), University of Cologne.

Organization and Administration

- since 2019 Member of the UNIL-EPFL Centre for Digital Humanities (dhCenter)
Nov 2019 Workshop "Hierarchical Music Analysis", DCML, EPFL.
since 2018 Assessor in examinations, DCML, EPFL.
since 2018 Co-founder and vice-president of the Digital Humanities Student Association *dhelta* at EPFL.
since 2017 Member of the Gesellschaft für Musiktheorie (GMTH)
since 2016 Reviewer for the International Conference of Students of Systematic Musicology
2015–2017 Assessor in examinations, DMCL, TUD, Dresden, Germany.
2015 Co-organization of lecture series "Systematic Musicology: Perception and Cognition of Music", DMCL, TUD, Dresden, Germany.
2013 Co-organization of the international conference Musical Meter in Comparative Perspective, HfMT, Cologne, Germany

Skills

- Languages Python, HTML/CSS; German (native), English (fluent), French, Spanish (basic)
Utilities Anaconda, Git, Jupyter Notebook, LaTeX

Extra Curricular Activities

- Voice Classical a-capella octet *Vokalexkursion* (2014–2017); Cologne Cathedral Chamber Choir (2013–2015); Director of several children's choirs at Musikschule Leverkusen (2012–2014); Cologne Conservatory Chamber Choir (2011–2013); Pop a-capella group *gezwungenermaßen* (2008–2013)
Instruments Guitar (since 1994), Piano (since 1993)