Fabian C. Moss | Curriculum Vitae

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Employment

Julius-Maximilians-Universität Würzburg (JMU) — **Assistant Professor (tenure track)**
Digital Music Philology and Music Theory, Würzburg, Germany — *2022/12–present*

University of Amsterdam (UvA) — **Research Fellow**
Cultural Analytics, Media Studies Department & Data Science Center, Amsterdam, The Netherlands — *2022/01–2022/11*

École Polytechnique Fédérale de Lausanne (EPFL) — **Postdoctoral Researcher**
Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland — *2020/02–2021/12*

École Polytechnique Fédérale de Lausanne (EPFL) — **Doctoral Assistant**
Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland — *2017-09–2020/01*

Technische Universität Dresden (TUD) — **Doctoral Assistant**
Dresden Music Cognition Lab (DMCL), Dresden, Germany — *2015/01–2017/08*

Musikschule Leverkusen — **Conductor and vocal coach**
Project "Jedem Kind seine Stimme" (JEKISS), Leverkusen, Germany — *2012/11–2014/12*

Education

École Polytechnique Fédérale de Lausanne (EPFL) — **PhD student**
Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland — *2017/09–2019/12*

Massachusetts Institute of Technology (MIT) — **Visiting Student**
Department of Linguistics and Philosophy, Cambridge, MA, USA — *2016/01–2016/03*

Technische Universität Dresden (TUD) — **PhD student**
Dresden Music Cognition Lab (DMCL), Dresden, Germany — *2015/01–2017/08*

Escola Superior de Musica de Catalunya (ESMUC) — **ERASMUS Exchange Student**
Barcelona, Spain — *2012/01–2012/04*

Hochschule für Musik und Tanz Köln (HfMT) — **Master of Arts**
Musicology, Cologne, Germany — *2011/04–2013/09*

Hochschule für Musik und Tanz Köln (HfMT) — **Staatexamen [State Examination]**
Music Education (Piano Major), Cologne, Germany — *2008/04–2013/09*

Universität zu Köln (UzK) — **Staatexamen [State Examination]**
Mathematics and Educational Sciences, Cologne, Germany — *2006/10–2016/09*

Friedrich-Wilhelm-Gymnasium Köln (FWG) — **Abitur [German High School Diploma]**
Cologne, Germany — *2002/09–2005/06*

Service

Academic responsibilities

08/2024–present Editorial advisory board of *Computational Humanities Research* (Cambridge University Press) **10/2023–present** Chair of examination board BA Musicology, JMU. **08/2023–present** Scientific advisory board of *Corpus Monodicum* project **2023** Program Committee Member for International Conference on Multimedia Retrieval **2022** Scientific Committee for Workshop on Computational Methods in the Humanities 2022 (COMHUM 2022); **2021** Programm Committee for 2nd Conference on Computational Humanities Research (CHR2021); **since 2020** Co-Chair of the Music Analysis Interest Group of the *Music Encoding Initiative* (MEI); **2018–2019** Co-founder and vice-president of the Digital Humanities Student Association *dhelta* at EPFL; **2012/10–2013/09** Financial officer for General Students' Commitee, HfMT

Memberships

05/2024–present Cultural Evolution Society **06/2023–present** University of Wuerzburg *Graduate School Humanities*, classes "Digital Humanities" & "Philosophy, Languages, Arts" **12/2022–present** Deutsche Gesellschaft Juniorprofessur (DGJ); Arbeitskreis "Philologie und Digitalität" (JMU) **10/2022–present** European COST Action *EarlyMuse* (2022–2026), Working Groups 2 (Sources) & 3 (Publications) https://www.cost.eu/actions/CA21161/ **11/2021–present** Deutscher Hochschulverband (DHV); **11/2021–present** European Society for the Cognitive Sciences of Music (ESCOM); **09/2021–present** International Society for Music Information Retrieval (ISMIR); **05/2020–12/2021**

EPFL Data Champions Community; **10/2019–present** Gesellschaft für Musikforschung (GfM); **10/2018–present** Gesellschaft für Musiktheorie (GMTH); **02/2018–12/2022** UNIL-EPFL Centre for Digital Humanities (dhCenter); **03/2015–08/2017** Dresden Technical University Graduate Academy; **10/2013–present** Arbeitsgemeinschaft für Rheinische Musikgeschichte

Reviewer activity

Journals: *Computational Humanities Research*; *Digital Scholarship in the Humanities*; *Empirical Musicology Review*; *Journal on Computing and Cultural Heritage*; *Journal of New Music Research*; *Music and Science*; *Music Theory and Analysis*; *Royal Society Open Science*; *Transactions of the International Society of Music Information Retrieval*; *Zeitschrift der Gesellschaft für Musiktheorie*

Conferences: *Conference on Computational Humanities Research (CHR)*; *Conference of the European Society for the Cognitive Sciences of Music (ESCOM)*; *Digital Libraries for Musicology (DLfM)*; *International Congress on Mathematics and Computation in Music (MCM)*; *International Conference on Multimedia Retrieval (ICMR)*; *International Conference on Music Perception and Cognition (ICMPC)*; *International Conference of Students of Systematic Musicology (SysMus)*; *Jahrestagung der Gesellschaft für Informatik (GI), Workshop zu Informatik und Digital Humanities (InfDH)*

Organization

2025: Short-Term Scientific Mission "Developing digital preservation, edition, and analysis of sources of medieval monophony and its theory", with Konstantin Voigt. EU-COST Action *EarlyMuse*, July 21–25 2025, Institut für Musikforschung, JMU, Würzburg, Germany.

2024: Themed session "After Digitization: Computational Modeling and Analysis of Medieval Chant", with Charles Atkinson, Ashley Burgoyne, Bas Cornelissen, Tim Eipert, Jan Hajič, Andreas Haug, Vojtěch Lanz, & Hana Vlhóva-Wörner. Annual International Medieval and Renaissance Music Conference (MedRen 2024), 6–9 July, 2024, Granada, Spain.

Workshop "Bayesian Modeling for Musicology" with Christoph Finkensiep (University of Amsterdam) and Jan Hajič (Charles University, Prague), 1–3 February, 2024. Zentrum für Philologie und Digitalität (ZPD), JMU, Würzburg, Germany. https://sites.google.com/view/bayesmusic2024/

2023: Lecture series "CODAMUS: Computational and Digital Approaches to Music Scholarship", 18 October, 2023–07 February, 2024. Zentrum für Philologie und Digitalität (ZPD), JMU, Würzburg, Germany. https://codamus.pubpub.org/

Kontrapunkt-Werkstatt "Latest Tools for Analyzing Early Music", with Hansjörg Ewert, Florian Vogt, Johannes Menke, & Ugo Bindini, 20–21 October, Würzburg, Germany. https://www.musikwissenschaft.uni-wuerzburg.de/diversa/tagungen/basel23/

Open project space for 16 contributions "Methoden und Ziele digitaler Musikwissenschaft: Ein Marktplatz aktueller Forschung", with Stefanie Acquavella-Rauch, Martin Albrecht-Hohmeier, Irmlind Capelle, Jürgen Diet, & Jens Dufner. Jahrestagung der Gesellschaft für Musikforschung, 4–7 October, 2023, Saarbrücken, Germany. https://www.uni-saarland.de/methoden-und-ziele-digitaler-musikwissenschaft-ein-marktplatz-aktueller-forschung.html

2022: CREATE Salon on "Computational Creativity", 23 November 2022, *Creative Amsterdam: An E-Humanities Perspective*, Media Studies Department, University of Amsterdam, The Netherlands. https://www.create.humanities.uva.nl/events/computational-creativity/

Workshop "Representing Harmony: Goals and Challenges", with Johannes Hentschel, Markus Neuwirth & Martin Rohrmeier. 13–16 September 2022, Digital and Cognitive Musicology Lab, École Polytechnique Fédérale de Lausanne, Switzerland. https://www.epfl.ch/labs/dcml/workshops/representing-harmony/

2021: Workshop "Musik – Schrift – Digitalität" [Music – Writing – Digitality], with Dennis Ried and Daniel Fütterer. 13–14 December 2021, Hochschule für Musik, Karlsruhe, Germany.

2019: Workshop "Schenkerian and Tonfeld Theory for Music Analysis". 12–15 December 2019, Digital and Cognitive Musicology Lab, École Polytechnique Fédérale de Lausanne, Switzerland. https://memento.epfl.ch/event/masterclass-schenkerian-and-tonfeld-theory-for-mus/

First Swiss Digital Humanities Exchange, with Jessica Pidoux, Gerhad Lauer, and Stefan Münnich. 8–9 February 2019, DH Lab, University of Basel, Switzerland. https://sites.google.com/view/dhexchange/

2015: Co-organization of lecture series "Systematic Musicology: Perception and Cognition of Music", lead: Martin Rohrmeier. Dresden Music Cognition Lab, Technichal University Dresden, Germany.

2013: Co-organization of the international conference "Musical Metre in Comparative Perspective", lead: Hans Neuhoff and Rainer Polak. 4–6 April 2013, Hochschule für Musik und Tanz Köln, Germany.

Funding

Grants

EU COST Action *EarlyMuse* Short-Term Scientific Mission (STSM) **EUR 2,000**
RISM Digital Center *2025/05*
Fabian C. Moss

Text+ Kooperationsprojekt **EUR 74,652**
Aufbau einer offenen digitalen Sammlung historischer musiktheoretischer Texte aus dem deutschsprachigen Raum anhand von Beispielen aus dem 19. Jahrhundert (DigiMusTh) *2025/01/01–202512/31*
Fabian C. Moss

Bayerisches Hochschulförderprogramm zur Anbahnung & Vertiefung internat. Forschungskooperationen **EUR 3,863**
Digital Choro: Exploring the potential of digitization and computational models for Brazil's musical cultural heritage *2024/01–2024/08*
Fabian C. Moss

WueDIVE – Digitale Innovationen in der Lehre **EUR 3,915**
Virtual tonal spaces (VTS): towards an interactive digital environment for music theory *2023/10–2024/06*
Fabian C. Moss

Julius-Maximilians-Universität Würzburg **EUR 8,310**
Start-up funding to prepare grant application [Anschubförderung zur Antragsstellung] *2022/12–2023/11*
Fabian C. Moss

Durham University Seedcorn Grant **GBP 7,475**
Funding for proof-of-concept study to support larger grant application *2022/06–2023/05*
Tuomas Eerola, Fabian C. Moss

University of Amsterdam Data Science Centre Accelerate Program (Matching Funding) **EUR 192,000**
Data Scientists/Engineers Cultural Data Access & Visualization, Spatial Humanities, Cultural Data Analysis *2022/04–2024/12*
Tobias Blanke, Fabian C. Moss, Julia Noordegraaf, & Thomas Poell

dhCenter UNIL-EPFL project fund **CHF 2'880**
Enabling interactive music visualization for a wider community *2021/07–2021/09*
Fabian C. Moss & Daniel Harasim

Collaborative Research on Science and Society (CROSS) **CHF 59'565**
Digitizing the Dualism Debate: A Case Study in the Computational Analysis of Historical Music Theory Sources *2021/01–2021/12*
Fabian C. Moss & François Bavaud

Awards and scholarships

2016–2017: Konrad Adenauer Foundation, PhD Scholarship; **2016/08:** TUD Graduate Academy, Travel Award; **2016/01–03** Deutscher Akademischer Austauschdienst (DAAD), great!$_{\text{ipid4all}}$ (group2group exchange for academic talents); **2014/09:** Society for Education and Music Psychology (SEMPRE), Travel Award; **2012/01–04:** European Union (EU), ERASMUS Scholarship; **2008–2013:** Konrad Adenauer Foundation, Student Scholarship

Publications

Journal articles

Hentschel, J., Rammos, Y., **Moss**, **F. C.**, Neuwirth, M., & Rohrmeier, M. (2024). An Annotated Corpus of Tonal Piano Music from the Long 19th Century. *Empirical Musicology Review*, *18*(1), 84–95. https://doi.org/10.18061/emr.v18i1.8903

Moss, **F. C.**, Lieck, R., & Rohrmeier, M. (2024). Computational modeling of interval distributions in tonal space reveals paradigmatic stylistic changes in Western music history. *Humanities and Social Sciences Communications*, *11*, 864. https://doi.org/10.1057/s41599-024-03168-1

Moss, **F. C.**, Neuwirth, M., & Rohrmeier, M. (2022). The line of fifths and the co-evolution of tonal pitch-classes. *Journal of Mathematics and Music*, *17*(2), 173–197. https://doi.org/10.1080/17459737.2022.2044927

Viaccoz, C., Harasim, D., **Moss**, **F. C.**, & Rohrmeier, M. (2022). Wavescapes: A visual hierarchical analysis of tonality using the discrete Fourier transform. *Musicae Scientiae*, 10298649211034906. https://doi.org/10.1177/10298649211034906

Harasim, D., **Moss**, **F. C.**, Ramirez, M., & Rohrmeier, M. (2021). Exploring the foundations of tonality: Statistical cognitive modeling of modes in the history of Western classical music. *Humanities and Social Sciences Communications*, *8*(1), 1–11. https://doi.org/10.1057/s41599-020-00678-6

Moss, **F. C.**, & Neuwirth, M. (2021a). FAIR, Open, Linked: Introducing the Special Issue on Open Science in Musicology. *Empirical Musicology Review*, *16*(1), 1–4. https://doi.org/10.18061/emr.v16i1.8246

Moss, **F. C.**, & Rohrmeier, M. (2021). Discovering Tonal Profiles with Latent Dirichlet Allocation. *Music & Science*, *4*. https://doi.org/10.1177/20592043211048827

Lieck, R., **Moss**, **F. C.**, & Rohrmeier, M. (2020). The Tonal Diffusion Model. *Transactions of the International Society for Music Information Retrieval*, *3*(1), 153–164. https://doi.org/10.5334/tismir.46

Moss, **F. C.**, Souza, W. F., & Rohrmeier, M. (2020). Harmony and form in Brazilian Choro: A corpus-driven approach to musical style analysis. *Journal of New Music Research*, *49*(5), 416–437. https://doi.org/10.1080/09298215.2020.1797109

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

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

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

Conference papers

Moss, **F. C.**, & Nakamura, E. (2024). Modeling the evolution of harmony in popular music from different cultural contexts. In W. Haverals, M. Koolen, & R. D. Thompson (Eds.), *Proceedings of the Fifth Conference on Computational Humanities Research (CHR 2024)* (pp. 137–152, Vol. 3834). CEUR. https://ceur-ws.org/Vol-3834/paper133.pdf

Pereira, S., Affatato, G., Bernardes, G., & **Moss**, **F. C.** (2024). Fourier Qualia Wavescapes: Hierarchical Analyses of Set Class Quality and Ambiguity. In T. Noll, M. Montiel, F. Gómez, O. C. Hamido, J. L. Besada, & J. O. Martins (Eds.), *Mathematics and Computation in Music* (pp. 317–329). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-60638-0_25

Eipert, T., & **Moss**, **F. C.** (2023b, November). MonodiKit: A data model and toolkit for medieval monophonic chant. In M. E. Thomae (Ed.), *Proceedings of the 10th International Conference on Digital Libraries for Musicology* (pp. 67–71). Association for Computing Machinery. https://doi.org/10.1145/3625135.3625145

Nakamura, E., Eipert, T., & **Moss**, **F. C.** (2023). Historical Changes of Modes and their Substructure Modeled as Pitch Distributions in Plainchant from the 1100s to the 1500s. In Kitahara, Tetsuro, Aramaki, Mitsuko, Kronland-Martinet, Richard, & Ystad, Sølvi (Eds.), *Proceedings of the 16th International Symposium on Computer Music Multidisciplinary Research* (pp. 450–461). https://doi.org/10.5281/zenodo.10113458

Bracks, C., & **Moss**, **F. C.** (2022, May). Totoli's Art of Lelegesan: Analyzing Sociocultural Context and Musical Content. In I. Ali-MacLachlan & A. Holzapfel (Eds.), *FMA2022: International Workshop on Folk Music Analysis* (pp. 1–5). https://doi.org/10.31219/osf.io/5tsxa

Harasim, D., Affatato, G., & **Moss**, **F. C.** (2022). midiVERTO: A Web Application to Visualize Tonality in Real Time. In M. Montiel, O. A. Agustín-Aquino, F. Gómez, J. Kastine, E. Lluis-Puebla, & B. Milam (Eds.), *Mathematics and Computation in Music* (pp. 363–368). Springer International Publishing. https://doi.org/10.1007/978-3-031-07015-0_31

Hentschel, J., **Moss**, **F. C.**, McLeod, A., Neuwirth, M., & Rohrmeier, M. (2022). Towards a unified model of chords in Western harmony. In S. Münnich & D. Rizo (Eds.), *Music Encoding Conference Proceedings 2021* (pp. 143–149). Humanities Commons. https://doi.org/10.17613/4crx-fr36

Moss, **F. C.**, Affatato, G., & Harasim, D. (2022, July). Phantom Curves: Scientific Discovery through Interactive Music Visualization. In L. Pugin (Ed.), *9th International Conference on Digital Libraries for Musicology* (pp. 60–64). Association for Computing Machinery. https://doi.org/10.1145/3543882.3543886

Moss, **F. C.**, Nápoles López, N., Köster, M., & Rizo, D. (2022b). Challenging sources: A new dataset for OMR of diverse 19th-century music theory examples. In J. Calvo-Zaragoza, A. Pacha, & E. Shatri (Eds.), *Proceedings of the 4th International Workshop on Reading Music Systems (WoRMS 2022)* (pp. 4–8). https://sites.google.com/view/worms2022/proceedings

Anzuoni, E., Ayhan, S., Dutto, F., McLeod, A., **Moss**, **F. C.**, & Rohrmeier, M. (2021, June). A Historical Analysis of Harmonic Progressions Using Chord Embeddings. In D. A. Mauro, S. Spagnol, & A. Valle (Eds.), *Proceedings of the 18th Sound and Music Computing Conference* (pp. 284–291). https://doi.org/10.5281/zenodo.5038910

Hentschel, J., **Moss**, **F. C.**, Neuwirth, M., & Rohrmeier, M. (2021). A semi-automated workflow paradigm for the distributed creation and curation of expert annotations. In J. H. Lee, A. Lerch, Z. Duan, J. Nam, P. Rao, P. van Kranenburg, & A. Srinivasamurthy (Eds.), *Proceedings of the 22nd International Society for Music Information Retrieval Conference, ISMIR 2021, Online, November 7-12, 2021* (pp. 262–269). https://archives.ismir.net/ismir2021/paper/000032.pdf

Moss, **F. C.**, Köster, M., Femminis, M., Métrailler, C., & Bavaud, F. (2021). Digitizing a 19th-Century Music Theory Debate for Computational Analysis. In M. Ehrmann, F. Karsdorp, M. Wevers, T. L. Andrews, M. Burghardt, M. Kestemont, E. Manjavacas, M. Piotrowski, & J. van Zundert (Eds.), *CHR 2021: Computational Humanities Research Conference, November 17–19, 2021, Amsterdam, The Netherlands* (pp. 159–170). CEUR. http://ceur-ws.org/Vol-2989/short_paper31.pdf

Rohrmeier, M., & **Moss**, **F. C.** (2021). A Formal Model of Extended Tonal Harmony. In J. H. Lee, A. Lerch, Z. Duan, J. Nam, P. Rao, P. van Kranenburg, & A. Srinivasamurthy (Eds.), *Proceedings of the 22nd International Society for Music Information Retrieval Conference, ISMIR 2021, Online, November 7-12, 2021* (pp. 569–578).

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 & Music Computing Conference (SMC 2019)* (pp. 250–254). https://doi.org/10.5281/zenodo.3249335

Moss, **F. C.** (2014). Tonality and functional equivalence: A multilevel model for the cognition of triadic progressions in 19th century music. In K. Jakubowski, N. Farrugia, & D. Müllensiefen (Eds.), *International Conference of Students of Systematic Musicology – Proceedings* (pp. 1–8).

Edited volumes

Moss, **F. C.**, Hentschel, J., Neuwirth, M., & Rohrmeier, M. (Eds.). (forthcoming). *Representing harmony: Challenges and Prospects for Computational Musicology*. Routledge.

Moss, **F. C.** (Ed.). (2024a). *Computational and digital approaches to music scholarship*. PubPub. https://codamus.pubpub.org/

Moss, **F. C.**, & Neuwirth, M. (Eds.). (2021b). Special Issue on Open Science in Musicology. *Empirical Musicology Review*, *16*(1). https://doi.org/10.18061/emr.v16i1.8246

Book chapters

Moss, **F. C.** (2024b). Transatlantic transformations: On Neo-Riemannian theories. In S. Keym (Ed.), *Kreative Missverständnisse oder universale Kunstgesetze? Hugo Riemann und der internationale Musikwissenstransfer* (pp. 367–377). Georg Olms Verlag.

Book reviews

Moss, **F. C.** (2017). [Review of David Huron. Voice Leading: The Science behind a Musical Art]. *Music Theory & Analysis*, *4*(1), 119–130. https://doi.org/10.11116/MTA.4.1.71

Data sets

Eipert, T., & **Moss**, **F. C.** (2023a, October). *Corpus Troporum Dataset*. OSF. https://doi.org/10.17605/OSF.IO/FKDQ5

Moss, **F. C.**, Nápoles López, N., Köster, M., & Rizo, D. (2022a, September). *19MT-OMR: A dataset for multimodal Optical Music Recognition* (Data Report). Data Report. OSF. https://doi.org/10.17605/osf.io/QM9Z5

Moss, **F. C.** (2020a, June 6). *Choro Songbook Corpus*. Zenodo. https://doi.org/10.5281/zenodo.3881347

Moss, **F. C.**, Neuwirth, M., & Rohrmeier, M. (2020). *Tonal Pitch-Class Counts Corpus (TP3C)*. Zenodo. https://doi.org/10.5281/zenodo.3600088

Moss, **F. C.**, Loayza, T., & Rohrmeier, M. (2019, July 1). *Pitchplots*. https://doi.org/10.5281/zenodo.3265393

Blog posts

Nachtwey, A., & **Moss**, **F. C.** (2024, December 20). *Big Data = Großes Wissen? Herausforderungen der digital-vergleichenden Korpusforschung*. musiconn.kontrovers – Debatten zur Musikwissenschaft. https://kontrovers.hypotheses.org/4370

Moss, **F. C.** (2023, September 26). *Vorsicht, Sackgasse! Ein Plädoyer für mehr Intradisziplinarität*. musiconn.kontrovers – Debatten zur Musikwissenschaft. https://kontrovers.hypotheses.org/2368 English version: https://osf.iohttps://osf.io/98zxn/.

Moss, **F. C.** (2020b, October 5). *A computational model for note distributions in musical pieces*. Digital and Cognitive Musicology Lab News Blog. https://www.epfl.ch/labs/dcml/computational-model-note-dists/

Moss, **F. C.** (2020c, September 28). *Tracing historical changes in the exploration of tonal space*. Digital and Cognitive Musicology Lab News Blog. https://www.epfl.ch/labs/dcml/tracing-historical-changes/

Theses

Moss, **F. C.** (2019). *Transitions of tonality: A model-based corpus study* [Doctoral dissertation, École Polytechnique Fédérale de Lausanne]. https://doi.org/10.5075/epfl-thesis-9808

Moss, **F. C.** (2012, November). *"Theorie der Tonfelder" nach Simon und "Neo-Riemannian Theory": Systematik, historische Bezüge und analytische Praxis im Vergleich* [Master's thesis, Hochschule für Musik und Tanz Köln]. https://doi.org/10.5281/zenodo.4748512

Outreach

Invited talks and workshops

2025: **Moss, F. C.** & Lesemann-Elliott, C. *Data collecting from musical sources*. EarlyMuse COST Action 21161, Working Group 2 ('Sources'). Institute of Musicology of the Slovak Academy of Sciences & University Library, 17–19 March, 2025, Bratislava, Slovakia.

2024: **Moss, F. C.** *Computational Musicology: oxymoron or perfect fit?* Graduate Schools Day, Julius-Maximilians-Universität Würzburg, 4 July 2024, Würzburg, Germany.

Moss, F. C. *Künstliche Intelligenz und Musikwissenschaft*. Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH) of the Austrian Academy of Sciences (ÖAW), Vienna, Austria, 17 Juni 2024.

Moss, F. C. *Corpus Research and Choro: Potential and Challenges for Digital Methods*. 3 April 2024. School of Music, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil.

2023: **Moss, F. C.** *Virtual Tonal Spaces (VTS): towards an interactive digital environment for music theory*. Tag der Lehre 2023. Julius-Maximilians-Universität Würzburg, 22 November 2023, Würzburg, Germany.

Moss, F. C. *10 secret rules for a degree in DH – you won't believe no. 7!!*. 1st DH Alumni Event, 17 November 2023. Digital Humanities Insitute, École Polytechnique Fédérale de Lausanne, Switzerland.

Moss, F. C. *Counting notes: Research questions and methods in music corpus studies*. Seminar "History and Theory of Digital Humanities", Université de Lausanne, Lausanne, Switzerland, 12 October 2023.

Moss, F. C. *Töne zählen: Forschungsfragen und Methoden musikwissenschaftlicher Korpusstudien in historischer und epistemologischer Perspektive*. Talk in lecture series "Transdisziplinäre Aspekte digitaler Methodik in den Geistes- und Kulturwissenschaften", Leibniz-Institut für Europäische Geschichte, Mainz, Germany, 28 June, 2023.

Moss, F. C. *Musik Er-Zählen: Einblicke in die digitale Korpusforschung*. Vortrag im Institutskolloquium des Instituts für Musikforschung, JMU, 20 June, 2023.

Moss, F. C. Respondent to Sanja Kiš Žuvela: *Musical Terminology, Digital Corpus Management and Translation*. GMTH International Music Theory Lectures. 9 February, 2023.

Arthur, C., Baker, D., Burgoyne, J. A., Cecchetti, G., Eerola, T., Farbood, M., Finkensiep, C., Harrison, P., Koelsch, S., Margulis, E., **Moss, F. C.**, Neuwirth, M., Pearce, M., Pelofi, C., Rammos, Y., Rohrmeier, M., & Volk, A. *Decoding Musical Structure: Theory, Computation, and Neuroscience* (Workshop). Congressi Stefano Franscini, Monte Verità, 5–9 February, 2023.

2022: **Moss, F. C.** *Music Stylometry – the Case of Choro*. Music Cognition Lab Meeting, Princeton University [online], 2 November, 2022.

Moss, F. C. *Learning about Machine Learning with CRIM*. Digital Counterpoints: Exploring Similarity in Renaissance Music, October 20–22, 2022, Haverford College, Department of Music, Haverford, PA.

Moss, F. C. *midiVERTO: A web-based tool to make computational music analysis more accessible*. Institute für Musik und Musikwissenschaft, Technische Universität Dortmund, Germany, 28 April.

Moss, F. C. *Interactive Music Analysis using the DFT and Pitch-Class Distributions extracted from MIDI files*. Faculdade de Engenharia da Universidade do Porto (FEUP), Porto, Portugal, 4 April 2022.

Moss, F. C. *Music Theory and the Discrete Fourier Transform*. Cognitive and Systematic Musicology Lab Meeting, The Ohio State University, Columbus, USA [online], 25 March 2022.

2021: **Moss, F. C.** *The Science of Music.* EPFL Information Days, 24–25 November 2021, Lausanne, Switzerland. https://youtu.be/y5TQNo9zDVI

Moss, F. C. *Boosting Open Research in Empirical Musicology*. EPFL Data Champions Meeting (DCBreak#3). March 18, 2021, Lausanne, Switzerland [online].

2020: **Moss, F. C.** *The Importance of Modeling in Computational Musicology*. Round-table on "Probability and Music", 5th International Congress of Music and Mathematics (MusMat 2020) – Perspectives and Applications of Mathematics in Post-Tonal Theories («Homage to Jamary Oliveira»), December 8–12, Rio de Janeiro, Brazil [online].

Moss, F. C. *Data-Driven Music History*. Workshop for the International Conference of Students of Systematic Musicology, York University, September 14, 2020, York, UK [online].

Moss, F. C. *Computational Musicology and the Digital Humanities: Problems, Practices, and Prospects*. CRETA-Werkstatt #9, Center for Reflected Text Analytics, University of Stuttgart, February 18, 2020, Stuttgart, Germany.

2019: **Moss, F. C.** *Tracing the History of Tonality with Note Distributions*. "Corpus Research as a Means of Unlocking Musical Gram-

mar" International Research Workshop, July 1–4, 2019, Tel-Aviv, Israel.

2018: **Moss, F. C.** *Corpus Research in Digital Musicology*. Seminar "Willkommen in der Matrix: Digitale Anwendungen für die Musikanalyse in Theorie und Praxis", University of Basel, Basel, 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. *From Beethoven to Brazil: Digital Musicology at EPFL*. Digital Synergies: Ca' Foscari meets École Polytechnique Fédérale de Lausanne. Global Challenges Seminar - Team "Creative arts, cultural heritage and digital humanities", Venice, Italy.

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. *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. & Harasim, D. *Extended Tonality and Music Cognition*. Symposium "Towards a World Music Theory", University of Hamburg, Institute for Systematic Musicology, Hamburg, Germany.

Conference presentations

2025: Nachtwey, A., & **Moss, F. C.** *Beyond Bars: Distribution of Differences in Music Prints*. Music Encoding Conference 2025. 3–6 June 2025, London, UK.

Stickler, F., Roeder, T., & **Moss, F. C.** *A Minimal Publishing Model for Text and Music Notation*. Music Encoding Conference 2025. 3–6 June 2025, London, UK.

2024: **Moss, F. C.** & Nakamura, E. *Modeling the evolution of harmony in popular music from different cultural contexts*. CHR2024: Fifth Conference on Computational Humanities Research, 4–6 December 2024, Aarhus, Denmark.

Hofmann, L., Sapp, C. S., & **Moss, F. C.** *Metrical Irregularities and Polymetric Structures in Hugo Distler's Vocal Works: Towards a Digital Corpus Study*. 2nd International Conference on Computational and Cognitive Musicology, 17–18 October 2024, Utrecht, The Netherlands.

Nachtwey, A. & **Moss, F. C.** *Digitale Korpusbildung in der Musikforschung: Herausforderungen und Lösungsansätze für die quantitative Analyse von Musikeditionsvarianten*. Jahrestagung der Gesellschaft für Musikforschung 2024, 11–14 September 2024, Cologne, Germany.

Hofmann, L. & **Moss, F. C.** *"Zeitgemäß polyphon". Zur Kodierung und Modellierung von Polymetrik und metrischer Irregularität in Hugo Distlers Vokalwerken*. Jahrestagung der Gesellschaft für Musikforschung, 11–14 September 2024, Cologne, Germany.

Eipert, T. & **Moss, F. C.** *Digital Paths Through History: Phylogenetic Analysis of Medieval Chants from the Graduale Synopticum Data*. [Poster] Jahrestagung der Gesellschaft für Musikforschung, 11–14 September 2024, Cologne, Germany.

Moss, F. C. & Nakamura, E. *Cross-cultural modeling of the evolution of harmony in popular music*. Cultural Evolution Society Conference (CES 24), 9–11 September 2024, Durham, UK.

Eipert, T., **Moss, F. C.**, & Vlhóva-Wörner, H. *Reconstructing the Formation of Trope Traditions through Network Models*. Annual International Medieval and Renaissance Music Conference (MedRen) 2024, 6–9 July, 2024, Granada, Spain.

Polykarpidis, P., Kalofonos, Dionysios., **Moss, F. C.**, & Anagnostopoulou, C. *Echos (mode) classification in heirmologic corpora of Byzantine music*. [Poster] Annual International Medieval and Renaissance Music Conference (MedRen) 2024, 6–9 July, 2024, Granada, Spain.

Hofmann, T., Sapp, C., & **Moss, F. C.** *Encoding polymeters and metric irregularities in selected motets from Hugo Distler's* Der Jahrkreis *op. 5 using different music encoding formats.* ECHOES conference "Digital Technologies Applied to Music Research: Methodologies, Projects and Challenges", 27-29 June 2024, Lisbon, Portugal.

Eipert, T., Hartelt, A., **Moss, F. C.**, Puppe, F. *Medieval Chant Lineages Unlocked: Leveraging Optical Music Recognition for Phylogenetic Analysis of Gregorian Proper.* ECHOES conference "Digital Technologies Applied to Music Research: Methodologies, Projects and Challenges", 27-29 June 2024, Lisbon, Portugal.

Pereira, S., Affatato, G., Bernardes, G., & **Moss, F. C.** *Fourier Qualia Wavescapes: Hierarchical Analyses of Set Class Quality and Ambiguity*. 9th International Conference on Mathematics and Computation in Music (MCM2024). Universidade de Coimbra, Coimbra, Portugal, 18–21 June 2024.

2023: Nakamura, E., Eipert, T. & **Moss, F. C.** *Historical Changes of Modes and their Substructure Modeled as Pitch Distributions in Plainchant from the 1100s to the 1500s*. 16th International Symposium on Computer Music Multidisciplinary Resarch (CMMR2023), 13–17 November 2023, Tokyo, Japan.

Eipert, T. & **Moss, F. C.** *MonodiKit: A data model and toolkit for the Corpus Monodicum*. The 10th International Conference on Digital Libraries for Musicology (DLfM '23), 10 November 2022, Milano, Italy.

Eipert, T. & **Moss, F. C.** *Communities in Medieval Troper Networks are Shaped by Carolingian Politics*. Poster. The 10th International Conference on Digital Libraries for Musicology (DLfM '23), 10 November 2022, Milano, Italy.

Yust, J., Affatato, G., & **Moss, F. C.**. *Animated Harmonic Analysis Using DFT Phase Spaces and Coefficient Products*. Joint Annual Meeting of the American Musicological Society (AMS) and the Society for Music Theory (SMT), 9–12 November 2023, Denver, Colorado.

Moss, F. C. *Korpusforschung und Digitale Edition: ein Plädoyer für stärkere Intradisziplinarität*. Beitrag im Panel "Musikalische Korpusforschung: Aktuelle Trends und Herausforderungen", mit Markus Neuwirth, Martin Rohrmeier, Christof Weiß, Johannes Hentschel & Maik Köster. Jahrestagung der Gesellschaft für Musikforschung, 4–7 October, 2023, Saarbrücken, Germany.

Eipert, T., Frieler, K., & **Moss, F. C.** *Inside or Outside: The Use of Scales in Jazz Solo Improvisations*. Poster.Jahrestagung der Gesellschaft für Musikforschung, 4–7 October, 2023, Saarbrücken, Germany.

Moss, F. C. [Cancelled.] *Star Plots: eine neue Methode zur Visualisierung harmonischer Pfade für vierstimmige Kompositionen*. 23. Jahreskongress der Gesellschaft für Musiktheorie (GMTH) "Musiktheorie und Künstlerische Forschung", 22-24 September 2023, Hochschule für Musik Freiburg, Freiburg im Breisgau, Germany.

Roeder, T., Köster, M., & **Moss, F. C.** *Music-Text Interlinking as a Challenge for Digital Encodings of Music-Theoretical Writings*. Encoding Cultures – Joint MEC and TEI Conference 2023, 4–8 September 2023, Zentrum Musik – Edition – Medien (ZenMEM), Paderborn, Germany.

Eipert, T. & **Moss, F. C.** *A system of trope elements: using network models to understand interrelations within the transmission of trope complexes*. Annual International Medieval and Renaissance Music Conference (MedRen) 2023, 24–28 July, 2023, Munich, Germany.

2022: **Moss, F. C.**, Nápoles López, N., Köster, M. & Rizo, D. *Challenging sources: a new dataset for OMR of diverse 19th-century music theory examples*. 4th International Workshop on Reading Music Systems (WoRMS 2022), 18 November 2022 [online].

Köster, M. & **Moss, F. C.** *Der harmonische Dualismus und seine Entwicklung zum 'Streit- und Angelpunkt der Musiktheorie' – eine Diskursanalyse*. Jahrestagung der Gesellschaft für Musikforschung. Nach der Norm: Musikwissenschaft im 21. Jahrhundert, 29 September – 1 October 2022, Humboldt-Universität Berlin, Berlin, Germany.

Moss, F. C. & Métrailler, C. [Cancelled.] *Reading Music Theory from a Distance: A Corpus Study of the Thesaurus Musicarum Italicarum*. 21st Quinquennial Congress of the International Musicological Society (IMS2022), 22–26 August 2022, Athens, Greece.

Moss, F. C., Affatato, G. & Harasim, D. *Phantom Curves: Scientific Discovery through Interactive Music Visualization*. The 9th International Conference on Digital Libraries for Musicology (DLfM), In association with the annual conference of the International Association of Music Libraries (IAML), 28 July 2022, Prague, Czech Republic.

Harasim, D., Affatato, G., & **Moss, F. C.**. *midiVERTO: A Web Application to Visualize Tonality in Real Time*. 8th International Conference on Mathematics and Computation in Music (MCM2022). Georgia State University, Atlanta, USA, 21–24 June 2022.

Bracks, C. & **Moss, F. C.** *Totoli's Art of Lelegesan: Analyzing Sociocultural Context and Musical Content*. 10th International Workshop on Folk Music Analysis 2022 (FMA2022), University of Sheffield, Sheffield, UK, June 14–17, 2022.

Meng, S., **Moss, F. C.**, & Rohrmeier, M. *Revisiting Tong Yun San Gong theory in Chinese music: a corpus study of Chinese folksongs.* 7th Analytical Approaches to World Music Conference (AAWM2022), University of Sheffield, Sheffield, UK, June 14–17, 2022.

2021: **Moss, F. C.**, Köster, M., Femminis, M., Métrailler, C., & Bavaud, F. *Digitizing a 19th-century music theory debate for computational analysis*. CHR 2021: Computational Humanities Research Conference, November 17–19, 2021, Amsterdam, The Netherlands [online].

Moss, F. C. *Polytonality and the Emergence of Tone Fields in Tailleferre's* Pastorale. 21. Jahreskongress der Gesellschaft für Musiktheorie (GMTH) – Tonsysteme und Stimmungen. October 1–3, 2021, Musik-Akademie Basel/Hochschule für Musik (FHNW), Basel, Switzerland.

Hentschel, J., **Moss, F. C.**, Markus Neuwirth, & Rohrmeier, M. *Die Entwicklung der tonalen Sprache in Beethovens Streichquartetten: Eine vergleichende Korpusstudie der Schaffensphasen*. XVII. Internationaler Kongress der Gesellschaft für Musikforschung, Universität Bonn, Abteilung für Musikwissenschaft/Sound Studies und Beethoven-Archiv des Beethoven-Hauses Bonn Bonn, Germany, September 28 – October 1 2021, Bonn, Germany.

Moss, F. C. *Digitizing the Dualism Debate: a case study in the computational analysis of historical music theory sources*. CROSS 2021 Event. 16 September 2021, École Polytechnique Fédérale de Lausanne/Université de Lausanne, Lausanne, Switzerland.

Moss, F. C., Herff, S. A., & Rohrmeier, M. *Modeling perceived tonal stability of individual and aggregated listener responses for scales and cadences*. 16th International Conference on Music Perception and Cognition & 11th triennial conference of the European Society for the Cognitive Sciences of Music. July 28–31, Sheffield, UK [online].

Moss, F. C., Herff, S. A., & Rohrmeier, M. *Individual perception of diatonic scales predicts perceived tonal fit in octatonic and hexatonic contexts*. 16th International Conference on Music Perception and Cognition & 11th triennial conference of the European Society for the Cognitive Sciences of Music. July 28–31, Sheffield, UK [online].

Hentschel, J., **Moss, F. C.**, McLeod, A., & Rohrmeier, M. *Towards a Unified Model of Chords in Western Harmony*. Music Encoding Conference [online].

Anzuoni, E., Ayhan, S., Dutto, F., McLeod, A., **Moss, F. C.**, & Rohrmeier, M. *A Historical Analysis of Harmonic Progressions Using Chord Embeddings*. 18th Sound and Music Computing Conference [online].

Moss, F. C. *Discovering the line of fifths in a large historical corpus*. Future Directions of Music Cognition, The Ohio State University, March 6–7, 2021, Columbus, OH [online]. https://doi.org/10.17605/OSF.IO/J5W6T

2020: **Moss, F. C.** *Analyzing musical pieces on the Tonnetz using the* pitchplots *Python library*. 20. Jahreskongress der Gesellschaft für Musiktheorie (GMTH), Hochschule für Musik Detmold, October 1–4, 2020, Detmold, Germany [online].

2019: **Moss, F. C.** *Transitions of Tonality: Perspectives on the Historical Changes of Tonal Pitch Relations from Computational Musicology, Music Theory, and the Digital Humanities*. University of Cologne, November 29, 2019, Cologne, Germany.

Moss, F. C. *Inferring Tonality from Note Distributions – Why Models Matter (Poster)*. SEMPRE 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.

Harasim, D., **Moss, F. C.** & Ramirez, M. *A Brief History of Tonality* (Poster). Applied Machine Learning Days, EPFL, Switzerland.

2017: **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 Popu-

larmusikforschung (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., 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., 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. *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. *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.

Science Communication

2024: Moss, F. C., *Musik und Mathematik – Wie passt das eigentlich zusammen?*, Science Slam 2024, Julius-Maximilians-Universität Würzburg, 8 November 2024. https://www.uni-wuerzburg.de/alumni/alle-veranstaltungen/science-slam/science-slam-2024/

2021: Rohrmeier, M. & **Moss, F. C.** *Music, Mathematics, and the Geometry of Jazz*. Montreux Jazz Festival, July 11, 2021, Montreux, Switzerland. https://www.montreuxjazzfestival.com/de/artist/martin-rohrmeier/

2017: Moss, F. C. *Musik und Sprache*. Talk for Student Association "Denkzettel", TUD, Dresden, Germany.

Teaching

Spring 2025: "Musikalische Korpusforschung: Harmonische Annotationen"; "Notationskunde 2.0: Digitale Repräsentationen von Musik und Notationssoftware"

Fall 2024: "YouTube Music Theory"; "Programmieren für Musikforschende"; "Wie über Musik forschen? (Institutskolloquium)"

Spring 2024: "Metrum, Rhythmus, Takt und Beat - theoretische und psychologische Aspekte musikalischer Zeit"; "Einführung in die Digitale Musikwissenschaft", "Musikforschung interdisziplinär" (Institutskolloquium), JMU

Fall 2023: "CODAMUS: Computational and Digital Approaches to Music Scholarship" (international lecture series); "Die Entstehung von 'Tonalität' im 19. Jahrhundert", JMU

Spring 2023: "Musikalische Korpusforschung"; "Konzepte und Anwendungen der Pitch-Class Set Theory"; "Digitale Tools (nicht nur) für Musikwissenschaftliche Projektarbeiten", JMU

Fall 2022: "Neo-Riemannian Theories: Analysemethoden für erweiterte Tonalität von der Spätromantik bis zur Filmmusik"; "Music Memes: Quantitative Zugänge und Theorien zu kultureller Transmission von Musik", JMU

Spring 2021: "Musical Diversity across Historical Time", lecture in class "Digital Musicology", EPFL

Fall 2020: "Introduction to Musical Corpus Studies"; "Tonality: Perspectices of historical musicology and corpus studies", lecture in "Ringvorlesung Musikwissenschaft", UzK

Spring 2020: "Musical improvisation, invention and creativity", teaching assistant; "Musical Diversity across Historical Time", lecture in class "Digital Musicology", EPFL

Spring 2018: "Digital Musicology", teaching assistant, EPFL

2015–2017: "Introduction to Musicology" and "Reading Class Musicology", with Christoph Wald, TUD

Spring 2013: "Academic Writing and Research Techniques", HfMT

Supervision and mentoring

PhD thesis supervision

10/2023–today: Adrian Nachtwey: "Eine Studie zur textkritischen Analyse von Musikeditionsvarianten im 19. Jahrhundert unter Anwendung von digitalen Methoden" (Musicology), JMU

Tim Eipert: "A Quantitative Perspective on Transmission, Structure, and Modality of Medieval Chant", Graduate School Humanities (Digital Humanities), JMU

Lucas Hofmann: "Computational modeling of complex temporal and tonal structures in early twentieth-century music", Graduate School Humanities (Digital Humanities), JMU

07/2022–today: Shuxin Meng, Digital Humanities, EPFL (1st supervisor: Martin Rohrmeier)

Spring 2017: Willian Fernandes de Souza (peer-mentoring): "Estilo e Sintaxe: quatro ensaios analíticos em práticas do choro" (Music Theory/Composition), Universidade Federal do Rio de Janeiro (UFRJ)

Master thesis supervision

Fall 2023: Francesco Paolo Leonardo La Barbera: "Proportionen, Transformationen oder Tonfelder? Die vergleichende Anwendung dreier musiktheoretischer Ansätze" (Musicology), Universität Leipzig (1st supervisor: Stefan Keym)

Felicitas Stickler: "Das Passionsoratorium „Der sterbende Heiland" von Ignaz Franz Xaver Kürzinger. Edition – Kritischer Bericht – Analytische Aspekte" (Musicology), JMU (1st supervisor: Ulrich Konrad)

Julia Groblewski-Meiser: "Narration und Interpretation: Allegorische Darstellungen einer musikalischen Harmonie im Kuppelfresko von Santa Maria del Fiore von Giorgio Vasari" (Musicology), JMU

Oscar Aquite Pena: "Between millo and picó: music as discursive masking in *La Puntica No Ma*', costume troupe of the Barranquilla Carnival (Colombia)" (Ethnomusicology), JMU (1st supervisor: Nepomuk Riva)

Spring 2020: Cédric Viaccoz (Digital Humanities, 3rd supervisor): "Visual Hierarchical Analysis of Tonality using the Discrete Fourier Transform", EPFL

Bachelor thesis supervsion

Fall 2024: Miriam Fodil: "Die Rolle parasozialer Beziehungen in der Entwicklung von Fan-Economies: Wie K-Pop-Unternehmen von emotionalen Fanbindungen profitieren", Musicology, JMU.'

Felicitas Stickler: "Ein minimales Modell für die gemischte Kodierung von Text (TEI) und Musiknotation (MEI)", Digital Humanities, JMU

Spring 2023: Corinna Bongartz: "Musik und Künstliche Intelligenz: Eine Untersuchung der Zuordnung festgelegter Prompts zu durch Sprachmodellen erzeugt Musiksnippets", Musicology, JMU

Spring 2022: Iris Folpmers (2nd supervisor): "Data Sonification: Turning Climate Data into Music" Artificial Intelligence, UvA, https://scripties.uba.uva.nl/search?id=record_29490

Other mentoring

Fall 2024: Digital-Humanities Projekt "Digitale Präsentation von XML-kodierten musiktheoretischen Texten mit CETEIcean" (Felicitas Stickler)

Fall 2020: 3 Machine Learning graduate student projects on vector embeddings of harmony (EPFL)

Fall 2019: Machine Learning graduate student project on vector embeddings of harmony (EPFL)

Fall 2018: 3 Machine Learning graduate student projects on chord prediction with neural networks (EPFL)

Spring 2018: 4 Digital Musicology graduate student projects (EPFL)

Fall 2015: interdisciplinary project of technical design undergraduate, Technische Universität Dresden (TUD)

Media coverage

Mar 2023: "Harmonie modellieren"

https://www.uni-wuerzburg.de/aktuelles/einblick/single/news/harmonie-modellieren/

Jan 2021: "Machine learning helps retrace evolution of classical music"

https://actu.epfl.ch/news/machine-learning-helps-retrace-evolution-of-clas-2/

Aug 2020: "Bringing computational music analysis beyond the traditional canon"

https://actu.epfl.ch/news/bringing-computational-music-analysis-beyond-the-t/

Jun 2019: "A Data Science Analysis Finds Beethoven's Style In His String Quartets"

https://www.forbes.com/sites/evaamsen/2019/06/06/a-data-science-analysis-finds-beethovens-style-in-his-string-quartets/

"Decoding Beethoven's music style using data science"

https://actu.epfl.ch/news/decoding-beethoven-s-music-style-using-data-scienc/

Mar 2019: "Creating connections in a growing digital humanities community"

https://actu.epfl.ch/news/creating-connections-in-a-growing-digital-humani-2/

Skills

Languages: Python, Latex, HTML, CSS, JavaScript
German (native), English (fluent), French (fluent), Spanish (basic), Portuguese (basic)

Utilities: Git, GitHub/Lab, Jupyter Notebook/Lab

Musical activities

2014–2017: Classical vocal octet *Vokalexkursion*

2012–2014: Cologne Opera Extra Choir

2008–2013: Pop a-capella group *gezwungenermaßen*

2013–2015: Cologne Cathedral Chamber Choir

2011–2013: Cologne Conservatory Chamber Choir

since 1993: Piano and Guitar