# Fabian C. Moss | Curriculum Vitae

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## Employment

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|---|---|
| **University of Amsterdam** | **Research Fellow** |
| *Cultural Analytics, Data Science Center, Amsterdam, The Netherlands* | *from 2022* |
| **École Polytechnique Fédérale de Lausanne (EPFL)** | **Postdoctoral Researcher** |
| *Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland* | *2020–2021* |
| **École Polytechnique Fédérale de Lausanne (EPFL)** | **Doctoral Assistant** |
| *Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland* | *2017–2019* |
| **Technische Universität Dresden (TUD)** | **Doctoral Assistant** |
| *Dresden Music Cognition Lab (DMCL), Dresden, Germany* | *2015–2017* |
| **Musikschule Leverkusen** | **Conductor and vocal coach** |
| *Project "Jedem Kind seine Stimme" (JEKISS), Leverkusen, Germany* | *2012–2014* |

## Education

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|---|---|
| **École Polytechnique Fédérale de Lausanne (EPFL)** | **PhD student** |
| *Digital and Cognitive Musicology Lab (DCML), Lausanne, Switzerland* | *2017–2019* |
| **Massachusetts Institute of Technology (MIT)** | **Visiting Student** |
| *Department of Linguistics and Philosophy, Cambridge, MA, USA* | *Jan–Mar 2016* |
| **Technische Universität Dresden (TUD)** | **PhD student** |
| *Dresden Music Cognition Lab (DMCL), Dresden, Germany* | *2015–2017* |
| **Escola Superior de Musica de Catalunya (ESMUC)** | **ERASMUS Exchange Student** |
| *Barcelona, Spain* | *Jan–Apr 2012* |
| **Hochschule für Musik und Tanz Köln (HfMT)** | **Master of Arts** |
| *Musicology, Cologne, Germany* | *2011–2013* |
| **Hochschule für Musik und Tanz Köln (HfMT)** | **Staatexamen [State Examination]** |
| *Music Education (Piano Major), Cologne, Germany* | *2008–2013* |
| **Universität zu Köln (UzK)** | **Staatexamen [State Examination]** |
| *Mathematics and Educational Sciences, Cologne, Germany* | *2006–2016* |
| **Friedrich-Wilhelm-Gymnasium Köln (FWG)** | **Abitur [German High School Diploma]** |
| *Cologne, Germany* | *2005* |

## Publications (*= Open Access)

### Theses

**PhD:** *\*Moss, F. C.** (2019). *Transitions of Tonality: A Model-Based Corpus Study*. Doctoral dissertation. École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland. Supervisors: Martin Rohrmeier & Markus Neuwirth. https://doi.org/10.5075/epfl-thesis-9808

**MA:** **Moss, F. C.** (2012). *"Theorie der Tonfelder" nach Simon und "Neo-Riemannian Theory": Systematik, historische Bezüge und analytische Praxis im Vergleich*. Supervisor: Hans Neuhoff. https://doi.org/10.5281/zenodo.4748512

### Journal Articles and Conference Papers

**in review:** *\*Moss, F. C.**, Herff, S., & Rohrmeier, M. (in review). Evidence for cognitive tonal hierarchies in cadential but not scalar contexts. *Music & Science*.

*\*Moss, F. C.**, Köster, M., Femminis, M., Metrailler, C., & Bavaud, F. (in review). Digitizing a 19th-century music theory debate for computational analysis. In: *CHR 2021: Computational Humanities Research Conference*, Amsterdam, The Netherlands.

*\*Moss, F. C.** & Rohrmeier, M. (in review). Discovering tonal structures with Latent Dirichlet Allocation. *Music & Science*.

*\*Moss, F. C.**, Neuwirth, M., & Rohrmeier, M. (in review). The line of fifths and the co-evolution of tonal pitch-classes. *Journal of Mathematics and Music*.

**in press:** *Rohrmeier, M., & **Moss, F. C.** (2021). A Formal Model of Extended Tonal Harmony In: *Proceedings of the 22nd International Society for Music Information Retrieval Conference.* [Online].

*Hentschel, J., **Moss, F. C.**, & Rohrmeier, M. (2021). A Semi-Automated Workflow Paradigm for the Distributed Creation and Curation of Expert Annotations. In: *Proceedings of the 22nd International Society for Music Information Retrieval Conference.* [Online].

***Moss, F. C.** & Neuwirth, M. (2021). FAIR, Open, Linked: Introducing the Special Issue on Open Science in Musicology. *Empirical Musicology Review*, 16(1).

*Viaccoz, C., Harasim, D., **Moss, F. C.**, & Rohrmeier, M. (2021). Wavescapes: A Visual Hierarchical Analysis of Tonality Using the Discrete Fourier Transformation. *Musicae Scientiae.* https://doi.org/10.1177/10298649211034906

**2021:** *Hentschel, J., **Moss, F. C.**, McLeod, A., Neuwirth, M., & Rohrmeier, M. (2021). Towards a Unified Model of Chords in Western Harmony. In: *Music Encoding Conference Proceedings 2021.* Alicante, Spain [Online].

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

*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(5), 1–11. https://doi.org/10.1057/s41599-020-00678-6

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

***Moss, F. C.**, de 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

**2019:** ***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.

*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

**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

**earlier:** 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.4.1.7

***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, UK.

***Moss, F. C.** *Albert Simons* Theorie der Tonfelder *und John Cloughs* Flip-Flop Circles *im Vergleich.* Zenodo. http://doi.org/10.5281/zenodo.3944462

## As editor

**forthcoming:** Special Issue on "Open Science in Musicology" in *Empirical Musicology Review*, with Markus Neuwirth.

## Datasets and Code

**2020:** ***Moss, F. C.**, Neuwirth, M., & Rohrmeier, M. (2020). Tonal Pitch-Class Counts Corpus (TP3C) [Data set]. *Zenodo.* https://doi.org/10.5281/zenodo.3600080

**2019:** ***Moss, F. C.**, Loayza, T., & Rohrmeier, M. (2019). pitchplots. *Zenodo.* https://doi.org/10.5281/zenodo.3265392

**2018:** ***Moss, F. C.**, de Souza, W. F., & Rohrmeier, M. (2018). Choro Songbook Corpus [Data set]. *Zenodo.* https://doi.org/10.5281/zenodo.1442764

## Blogposts

**2020:** "A computational model for note distributions in musical pieces"
https://www.epfl.ch/labs/dcml/computational-model-note-dists/

"Tracing historical changes in the exploration of tonal space"
https://www.epfl.ch/labs/dcml/tracing-historical-changes/

# Talks, Conference Presentations, Posters, and Workshops ([i] = invited)

## Workshops

**2021:** [i]Rohrmeier, M. & **Moss, F. C.** *Music, Mathematics, and the Geometry of Jazz*. Montreux Jazz Festival, July 11, 2021, Montreux, Switzerland.

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

**2018:** [i]**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.

## Talks

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

[i]**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.** *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.

[i]**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*). 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.

[i]**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.

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

**2017:** [i]**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.

[i]**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.

**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 Popularmusikforschung (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.

[i]**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:** [i]**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.

[i]**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.

[i]**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.

## Teaching

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

**Fall 2020:** "Introduction to Musical Corpus Studies", UzK.

"Tonality: Perspectices of historical musicology and corpus studies", lecture in "Ringvorlesung Musikwissenschaft", UzK.

**Spring 2020:** "Musical improvisation, invention and creativity", teaching assistant, EPFL.

"Musical Diversity across Historical Time", lecture in class "Digital Musicology", EPFL.

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

**2016–2017:** "Reading Class Musicology", with Christoph Wald, TUD.

**2015–2016:** "Introduction to Musicology", with Christoph Wald, TUD.

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

## Supervision

**Fall 2020**: Supervision of 3 Machine Learning graduate student projects on vector embeddings of harmony.

**Spring 2020**: Co-supervision of Digital Humanities MSc thesis.

**Fall 2019**: Supervision of Machine Learning graduate student project on vector embeddings of harmony.

**Fall 2018**: Supervision of 3 Machine Learning graduate student projects on chord prediction with neural networks.

**Spring 2018**: Supervision of 4 Digital Musicology graduate student projects.

**Spring 2017**: Peer-mentoring visiting PhD student in music theory/composition.

**Fall 2015**: Joint supervision of interdisciplinary project of technical design undergraduate.

## Funding

### Project grants

**dhCenter UNIL-EPFL project fund**
*Enabling interactive music visualization for a wider community* *2021*
PIs: Fabian C. Moss & Daniel Harasim, CHF 2'880

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

### Awards and scholarships

**2016–2017**: Konrad Adenauer Foundation, PhD Scholarship.

**Aug 2016**: TUD Graduate Academy, Travel Award.

**Jan–Mar 2016**: Deutscher Akademischer Austauschdienst (DAAD), great!$_{ipid4all}$ (group2group exchange for academic talents).

**Sep 2014**: Society for Education and Music Psychology (SEMPRE), Travel Award.

**Jan–Apr 2012**: European Union (EU), ERASMUS Scholarship.

**2008–2013**: Konrad Adenauer Foundation, Student Scholarship.

## Administration

### Organization

**2019:** Workshop "Schenkerian and Tonfeld Theory for Music Analysis", EPFL.

First Swiss Digital Humanities Exchange, in collaboration with University of Basel.

**2015:** Co-organization of lecture series "Systematic Musicology: Perception and Cognition of Music", TUD.

**2013:** Co-organization of the international conference "Musical Meter in Comparative Perspective", HfMT.

### Reviewer activity

**Journals:** *Empirical Musicology Review, Music and Science, Music Theory and Analysis, Transactions of the International Society of Music Information Retrieval, Zeitschrift der Gesellschaft für Musiktheorie*

**Conferences:** *Computational Humanities Research (CHR), Conference of the European Society for the Cognitive Sciences of Music (ESCOM), International Conference on Music Perception and Cognition (ICMPC), International Conference of Students of Systematic Musicology (SysMus)*

### Responsibilities and memberships

**since 2020:** Co-Chair of the Music Analysis Interest Group of the *Music Encoding Initiative* (MEI).

**since 2019:** UNIL-EPFL Centre for Digital Humanities (dhCenter); EPFL Data Champions Community; Gesellschaft für Musikforschung (GfM).

**2018–2019:** Co-founder and vice-president of the Digital Humanities Student Association *dhelta* at EPFL.

**since 2017:** Gesellschaft für Musiktheorie (GMTH).

**2012–2013:** Financial officer for General Students' Commitee [Finanzreferent AStA], HfMT.

## Media coverage

**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/

## Workshops and summer/winter schools attended

**2020:** Workshop "Transcribing – Encoding – Annotating: New Approaches of Technology and Methodology for Historical Sources in Crowd Sourcing and Citizen Science". Forschungsbibliothek Gotha der Universität Erfurt, November 26–27 [online].

Workshop "Musikalische Schrift und Digitalität", Basel, Switzerland, September 22–23.

*edirom* summer school (text and music encoding). Universtity of Paderborn. Paderborn, Germany, August 31– September 4 [online].

**2019:** Workshop "Research Data Management: introduction", EPFL Library, October 10.

**2018:** Workshop "Voice-leading schemata in theory, corpus research, and practical composition (Compose your own Chopin!)", EPFL, September 18–20.

Symposium "Archiving Intangible Cultural Heritage & Performing Arts: A Symposium and Summer School for Living Traditions", EPFL, August 6–7.

**2017:** Workshop "Meaning in Music: Bridging Musicological, Linguistic, and Neuroscientific Perspectives", EPFL, December 4–6.

Summer School "Exploring Edges: An International Colloquium between the Digital Humanities, Architecture, Artistic Research, and Critical Technical Practice", EPFL, July 11–14.

**2016:** Summer School "Cognitive Neuroscience of Music", University of Helsinki, August 11–17.

## Skills

**Languages:** Python, Latex, HTML/CSS

German (native), English (fluent), French (conversational), Spanish (basic)

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

## Musical activities

**2014–2017**: Classical vocal octet *Vokalexkursion*

**2013–2015**: Cologne Cathedral Chamber Choir

**2011–2013**: Cologne Conservatory Chamber Choir

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

**since 1994**: Guitar

**since 1993**: Piano