

Scales, Chords, and Cadences: Practical Music Theory for MIR Researchers

Overview

Tutorial Schedule

- **0:00 – 0:05** **Introductions**
- **0:05 – 0:55** **Scales (David Sears)**
- **0:55 – 1:45** **Chords (Johanna Devaney)**
- **1:45 – 1:55** **Break**
- **1:55 – 2:45** **Cadences (Daniel Shanahan)**
- **2:45 – 3:00** **Wrap up**



Introductions

- **David R. W. Sears**
 - David is an Assistant Professor of Interdisciplinary Arts and Co-Director of the Performing Arts Research Lab at Texas Tech University, where he teaches courses in arts psychology, arts informatics, and music theory. His current research examines the structural parallels between music and language using both behavioral and computational methods, with a particular emphasis on the many topics associated with pitch structure, including scale theory, tonality, harmony, cadence, and musical form. He holds a PhD in music theory from McGill University, and completed a postdoctoral fellowship at the Institute of Computational Perception at Johannes Kepler University.



Introductions

- **Johanna Devaney**
 - Johanna is an Assistant Professor at Brooklyn College and the CUNY Graduate Center, where she teaches courses in data analysis, music technology, music theory, and sonic arts. Her research focuses on interdisciplinary approaches to the study of musical performance, with a particular focus on the relationship between pitch structure and intonation in the singing voice. More broadly, she examines the ways in which recorded performances can be used to model performance and develops computational tools to facilitate this, primarily the Automatic Music Performance Analysis and Comparison Toolkit (AMPACT). Johanna has been active in the ISMIR community since 2008, giving the WiMIR keynote in 2020 and currently serving on the TISMIR editorial board. She holds a PhD in Music Technology from McGill University.



Introductions

- **Daniel Shanahan**
 - Dan is an Associate Professor of Music Theory and Cognition at Ohio State University. He is interested in studying musical transmission, musical communication, and jazz improvisation, and likes to explore these topics with both experimental and computational tools. Daniel's work has been published in Music Perception, The Journal of New Music Research, Musicae Scientiae, and many other outlets. He is an editor of the forthcoming Oxford Handbook of Corpus Studies in Music and has been managing editor of Empirical Musicology Review since 2012, serving as the journal co-editor since 2016. He also serves on the editorial boards of Music Theory Spectrum, Musicae Scientiae, and Indiana Theory Review. He holds a PhD in music theory from the University of Dublin, Trinity College

Github Repo with Tutorial Materials

**[https://github.com/jcdevaney/
ISMIR-musicTheoryTutorial](https://github.com/jcdevaney/ISMIR-musicTheoryTutorial)**

Zotero Bibliography for Tutorial

<https://www.zotero.org/groups/4502273/ismir-musictheorytutorial>

**Please put any questions you have during
the tutorial in the zoom chat**