

**Session Program**

**23-26 Jun 2026**

**Mathematics and Computation in Music 2026  
(MCM 2026)**

***Algebraic and Topological Perspectives on  
Scale Theory, Harmony, and Neo-Riemannian  
Transformations***

Bard College, Annandale-on-Hudson, New York, USA

# Wednesday 24 June

09:00

## Algebraic and Topological Perspectives on Scale Theory, Harmony, and Neo-Riemannian Transformations: Part 1

Session | Location: Olin Concert Hall in Franklin W. Olin Humanities Building

09:00–09:25 **All-Interval Series in Cyclic Spaces**

**Speaker**  
Ethan Bonnell

09:35–10:00 **Alternative Symmetries and Systems**

**Speaker**  
Luis R. A. Finotti

10:10–10:35

**A Matrix Representation of Lewin Duality, and Dualizing Operators for Dual Groups of Triadic Transformations**

**Speakers**  
Thomas M. Fiore, Thomas Noll

10:45–11:10 **A Theory of Scales and Orbit Covers**

**Speaker**  
Drew Flieder

11:15

11:35

## Algebraic and Topological Perspectives on Scale Theory, Harmony, and Neo-Riemannian Transformations: Part 2

Session | Location: Olin Concert Hall in Franklin W. Olin Humanities Building

11:35–12:00 **Symmetries of the Modal Color Theory Hyperplane Arrangements**

**Speaker**  
Paul M. Sherrill

12:10–12:35

**Wick-Rotated Fibonacci Polynomials from the Scale-Step Interval Patterns of the Pentatonic and Diatonic Collections**

**Speaker**  
M. A. Coury-Hall

12:40

13:50

## Algebraic and Topological Perspectives on Scale Theory, Harmony, and Neo-Riemannian Transformations: Part 3

Session | Location: Olin Concert Hall in Franklin W. Olin Humanities Building

13:50–14:15 **Harmonic Qualities of Generic Sets**

**Speaker**  
Jason Yust

14:25–14:50

**Modeling the Harmonic Syntax of Rock Music with Hidden Markov Models**

**Speaker**

Matthew Anthony Ludwig

15:00–15:25

**An Algebraic-Symmetric Analysis of Counterpoint and Modulation in the Music of Claudio Monteverdi**

**Speaker**

Octavio Agustin-Aquino

15:35–16:00

**Planar Projections of Tone Systems and Faithful Keyboards**

**Speaker**

Marek Zabka

16:05