



Lecture Series

MUSIC & MATHEMATICS

Musical Patterns in Musical Interactions:
Understanding and Employing Repetition in Music

Anja Volk

(Department of Information and Computing Sciences |
Utrecht University, NL)

EINE KOOPERATION VON



June 23, 2022
18.00 Salzburg (CEST)
Lecture online and in person
In English



Participation free of charge
No registration

Atelier in KunstQuartier,
Bergstraße 12a, 1. OG, 5020 Salzburg

Webex Login Details:

<https://globalpage-prod.webex.com/join>
Meeting number (access code): 2733 851 9217
Meeting password: YZqQvpTN834

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Over the past decades, mathematical and computational models of musical structures have been successfully developed in interdisciplinary research areas such as Mathematical Music Theory and Music Information Retrieval, with different goals such as music analysis, retrieval, classification or recommendation. In this talk, Anja Volk will discuss how the modelling process on the one hand uncovers layers of implicit musical knowledge applied by experts and ordinary listeners when interacting with music, and on the other hand enables new forms of interaction with music. Taking repetition in music, specifically repeated patterns, as the central topic of this talk, she will show how the modeling process contributes to enhancing our understanding of the role of musical repetition for how we make sense of music. Moreover, she will discuss how we employ this knowledge for facilitating novel forms of musical interactions, such as within serious games for music education, health care and well-being.

Anja Volk is Associate Professor at the Department of Information and Computing Sciences, Utrecht University. She has a dual background in mathematics and musicology which she applies to cross-disciplinary approaches at the intersection of computer science and music. Her research aims at enhancing our understanding of music as a fundamental human trait while applying these insights for developing music technologies that offer new ways of interacting with music, such as in the newly emerging field of music, computing, and health.



This series deals with the interdisciplinary approaches and perspectives between music and mathematics.

The implementation and design is carried out together with international experts from the fields of mathematics, statistics, computer science, composition and music research and opens up insights into current research and developments in the border areas between the scientific fields.

This lecture is part of an interdisciplinary course in which invited speakers discuss topics in their respective fields of research.

Concept & Direction

Arne Bathke (Statistician, Data Scientist, Head of Programme Area [Inter]Mediation | Department Artificial Intelligence and Human Interfaces, University of Salzburg)

Katarzyna Grebosz-Haring (Systematic Musicologist | Programme Area [Inter]Mediation, Focus Area Science & Art | University Mozarteum Salzburg, University of Salzburg)

Martin Losert (Music Educator, Head of Department Musikpädagogik, Head of Programme Area [Inter]Mediation)

In cooperation with Department Artificial Intelligence and Human Interfaces, University of Salzburg

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