WORKSHOP II

Sounding Archives | Archived Sounds

Moderation: Prof. Dr. Rolf Bader
(University of Hamburg, Institute of Systematic Musicology)

The future in music archiving and music search engines lie in Deep Learning and Big Data computation. Algorithms of Music Information Retrieval are able to automatically analyze musical features like timbre, melody, rhythm or musical form. Self-organizing maps and neural networks compare, sort and order musical pieces with respect to its features. New measurement techniques and physical modelling simulations of musical instruments lead to a new Digital Intelligence Organology. At the workshop a new Computational Phonogram Archiving standard is discussed as an interdisciplinary problem joining Ethnomusicology, Music and Computer Science, Systematic Musicology as well as Music Archives, Composers or Musicians. Tools, methods and platforms are shown and presented. Experiences in ethnomusicological fieldwork and archiving now also including the fields of musical acoustics, informatics, music theory and music storage, reproduction and metadata are discussed. The Computational Phonogram Archiving standard is also demanded in the music market as a search engine for music labels worldwide and the use and the developments in this field are presented.

- **Computational Phonogram Archiving**
  Rolf Bader (University of Hamburg, Institute of Systematic Musicology)
- **Neural Networks and Artificial Intelligence in Phonogram Archives**
  Michael Blass
- **Digital Intelligence Organology (DIO): Physical Modeling of Musical Instruments**
  Jost Fischer
- **Applications for 3D Representations of Musical Instruments**
  Niko Plath | Sebastian Kirsch
- **Reconstructing the past: UNESCO project of Thailand sea nomads music digital archive**
  Christian Koehn
- **Das „Virtuelle Konzerthaus": Kulturelle Teilhabe durch Digitalisierung**
  Annette Thoma[a] | Julien Letellier[b] (Konzerthaus Berlin[a] | HTW Berlin[b])