DEG Deutsche Forschungsgemeinschaft

September 23rd-24th, 2016 hochschulzentrum am horn University of Music Franz LISZT Weimar

The Jazzomat Research Project is situated at the intersection of jazz research, cognitive psychology of creativity, and statistical music analysis. One central aim is to describe and discriminate styles of jazz improvisation by examining jazz solos of various artists and styles with the help of a large computer database and newly developed software tools. Moreover, we want to explore the cognitive foundations of improvisation, test theories about the cognition of creative processes, and evaluate and enhance pedagogical approaches towards jazz improvisation. Furthermore, the project generally aims at advancing statistical and computational methods of music analysis in various areas of music information retrieval.

The Jazzomat Research Project is funded by the German Research Foundation with a four-and-a-half-year grant (September 2012 - March 2017). After four years of project runtime, the research workshop aims at presenting, sharing and discussing results of the project and at getting further theoretical and methodological input from international researchers with various areas of expertise. These include style analysis of jazz musicians and genres (session 1), psychology of creative processes (session 2), and music information retrieval, esp. audio-based music analysis and its interaction with symbolic music data (session 3).

Immediately before the Workshop, the International Summer School on Computational Musicology (ISSCoM2016) will take place in Weimar (20th - 22th September). The summer school will provide a comprehensive introduction into methods, applications, and potentials of computational musicology and music information retrieval and aims at students and young researchers. Results will be presented during the workshop. See: http://jazzomat.hfm-weimar.de/isscom2016.html.



The WeimarJazzDatabase currently (May 2016) encompasses 299 monophonic jazz improvisations by various artists and genres; they are transcribed and annotated in a MIDI-like format by project assistants.



MeloSpySuite and MeloSpyGUI are free, standalone software toolkits for the analysis of monophonic melodies, particularly jazz improvisations. They have been developed within the project and includes feature extraction (melfeature), pattern mining (melpat), and data conversion (melconv) tools along with detailed documentation and a set of introductory tutorials.

Free download: jazzomat.hfm-weimar.de/download/



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Free entrance, please register via e-mail: jazzomat@hfm-weimar.de

For further information: http://jazzomat.hfm-weimar.de/workshop2016



Perspectives for Computational **Jazz Studies**



Friday 23rd September

JAZZ STUDIES

09:00 **Klaus Frieler, Weimar**A Feature History of Jazz Improvisation

09:45 **André Doehring, Graz**Movin' Out. The Computer and Changing
Ways of Jazz Analysis

Coffee Break

11:00 **Wolf-Georg Zaddach**, Weimar
Tenor Sax Colossus: Harmonic and
Rhythmic Aspects of Michael Brecker's
and Chris Potter's Improvisation

11:45 **Martin Pfleiderer, Weimar**Comparative Studies of Jazz Improvisations

Lunchtime

13:30 Project Presentations of the International Summer School (ISSCoM 2016)

Coffee Break

The workshop takes place at hochschulzentrum am horn, Carl-Alexander-Platz 1, seminar room 1.

Music Psychology

15:00 **Kai Lothwesen, Klaus Frieler,**Frankfurt and Weimar
Ideational Flow Model (IFM). A New
Model for Jazz Improvisation

15:45 **Martin Norgaard, Atlanta**A Method for Identifying Motor Pattern
Boundaries in Jazz Piano Improvisations

Coffee Break

17:00 Andreas Kissenbeck, Munich
The Effect of Reference Systems in Music.
How the Principles of Cognitive Psychology
Are Reflected in Music Theory Concepts

17:45 **Martin Pfleiderer, Wolf-Georg Zaddach,**Weimar

How to Improvise? Insights from Recording Sessions and Surveys with Young Jazz Musicians

21:00 **Jam Session at Kasseturm,**Goetheplatz 10

Saturday 24th September

Music Information Retrieval

9:00 **Jakob Abeßer, Weimar / Ilmenau**Who's Playing that Solo? Recognizing
Jazz Musicians by Their "Unique Sound"

9:45 **Sebastian Böck**, Linz Automatic Beat and Downbeat Tracking in Jazz Recordings

10:30 **Christian Dittmar, Erlangen**Tracking Microtiming Variations in the
Course of a lazz Performance

Coffee Break

11:45 **Simon Dixon, London**Music Similarity and Cover Song
Identification: The Case of Iazz

12:30 **Stefan Balke, Erlangen**Using Domain Knowledge for Automatic
Structure Analysis of Jazz Recordings

13:30 FINAL DISCUSSION:

Perspectives for Computational
Methods in Jazz Research