PHENICX | Performances as Highly Enriched aNd Interactive Concerts eXperiences

SEVENTH FRAMEWORK PROGRAMME

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Consortium coordinators

Music Technology Group, Universitat Pompeu Fabra, Barcelona, Spain

Multimedia Information Retrieval Lab, Delft University of Technology, The Netherlands

Consortium partners

Department of Computational Perception, Johannes Kepler University Linz, Austria

IMP/ML Group, Austrian Research Institute for Artifical Intelligence, Vienna, Austria

Video Dock BV, Amsterdam, The Netherlands

Royal Concertgebouw Orchestra, Amsterdam, The Netherlands

Escola Superior de Música de Catalunya, Barcelona, Spain

Innovating the classical music experience

phenicx@upf.edu
http://phenicx.upf.edu

A live concert performance becomes a digital artefact

The goal of the PHENICX project is to create new digital experiences for live performances of classical music. In doing this, digital artefacts will be developed with three main characteristics:

Multimodal

The concert experience is not purely auditory. Information in other modalities (e.g. video, text, sensor data...) also should be considered.

Multi-perspective

We study the concert from different viewpoints, both physical (different camera and microphone positions) and personal (different user types).

Multilayer

At each point in time, multiple parallel layers of information are important to the musical experience. These layers may be very diverse, ranging from musical information to musician commentary and supporting resources.

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In the project, characteristics of both a musical **piece** as well as its **performance** will be explicitly considered. In order to deal with a user audience which is as diverse as possible, **profiling** and **personalization** techniques will receive major attention. As a result, novel **engaging** and **interactive** ways to explore live classical concerts are foreseen which can **enrich** the concert experience **before**, **during** and **after** the concert.

Pushing academic frontiers

The particular context of the PHENICX project calls for a broad spectrum of advancements. Academic topics of interest range a.o. from audio signal analysis and source separation techniques to gestural information analysis and multimodal information processing techniques, from performance modeling to score synchronization, and from social network analysis and recommendation to visualization techniques and interactive performance systems.

Sustainable user feedback

The non-academic project partners are renowned leaders in the industrial and musical world, and as such have unique access to a considerable population of potential PHENICX technology users. This will actively be exploited throughout the project. At the start of the project, use cases were established which were immediately validated in focus groups and discussion groups. In subsequent project iterations, potential user groups will once again be involved in refining requirements and success criteria, and testing both academic demonstrators and the first market-ready proof-of-concept releases.

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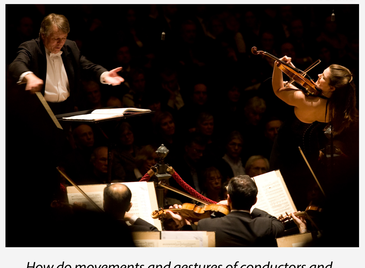

How do movements and gestures of conductors and musicians affect a performance?

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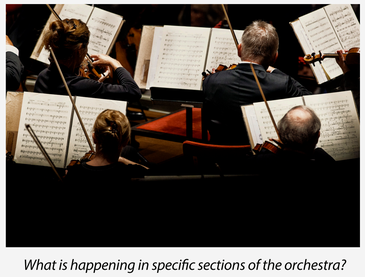
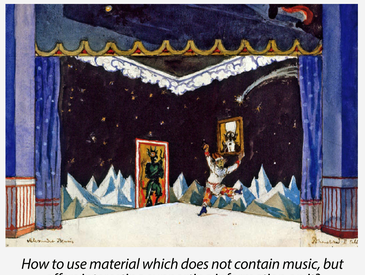
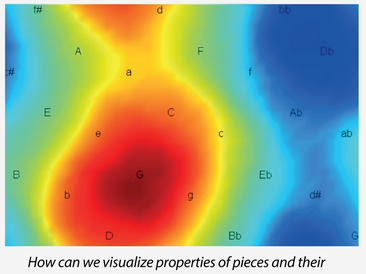
What can we learn from different performances of the same piece and rehearsal information?



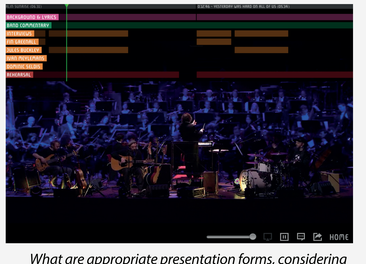
What is happening in specific sections of the orchestra?



How to use material which does not contain music, but offers interesting supporting information on it?



How can we visualize properties of pieces and their performance characteristics?



What are appropriate presentation forms, considering varying user experiences and backgrounds?

upf. Universitat Pompeu Fabra Barcelona — MTG Music Technology Group

TU Delft Delft University of Technology

MIR Delft Multimedia Information Retrieval Lab

JKU Johannes Kepler University Linz

Department of Computational Perception

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