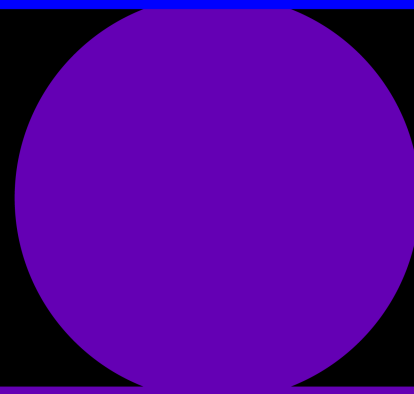


An interdisciplinary
approach to music
perception and cognition:
merging empirical aesthetics
with bioengineering



Series of seminar



→ Nicola Di Stefano
(Institute of Cognitive Sciences
and Technologies - CNR, Italy)

→ Save the date and join at
the link

→ February 8, 6pm CET

→ Abstract

In this talk, I present some of my recent research activities related to music perception and cognition. These activities can be framed within two main research frameworks, i.e., crossmodal/multisensory research and embodied music cognition. I start presenting the concept of crossmodal perception/correspondences, explaining why I believe that such concept/approach might shed light on music-related perceptual phenomena. I will then provide an example of this approach, discussing the concept of harmony and auditory roughness from a crossmodal perspective and introducing a related experimental protocol we are currently carrying out. Finally, I will move to present the embodied music cognition framework, presenting a couple of other protocols on music perception/action which fruitfully merge musicology with bioengineering.

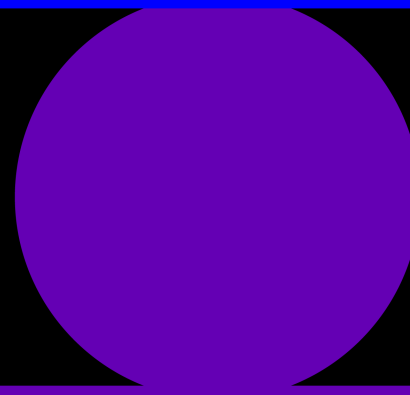
→ Speaker biography

Nicola Di Stefano (M.A. Philosophy, University of Milan; PhD Campus Bio-Medico University of Rome) worked as post-doc researcher at FAST (Institute of Philosophy of Scientific and Technological Practice), Campus Bio-Medico of Rome, before obtaining a two-year research fellowship at the Department of Philosophy and Cultural Heritage, Ca' Foscari University of Venice. Currently, he works as researcher at the National Research Council of Italy. His research activity focuses mainly on music perception and cognition. He authored a book (Carocci, 2016), several chapters and many articles in international scientific journals, such as *Psychology of Music*, *i-Perception*, *Journal of Interdisciplinary Music Studies*, *Experimental Brain Research*, *Rivista di Estetica*, and *Studi di Estetica*. He also co-edited volumes for international publishers, such as Springer and McGraw-Hill. He is adjunct professor at the University of Arkansas Rome Center. He is member of the editorial board of *Sensibilia Colloquium on Perception and Experience*, of the *International Lexicon of Aesthetics*, and of *De Musica*. He is member of the Society for Music Perception and Cognition (SMPC) of the European Society for the Cognitive Sciences of Music (ESCOM) and the Società Italiana d'Estetica (SIE). Currently, he is involved as key person in the EU funded projects CONBOTS and NIMA.

Some Approaches to Model Melodic Similarity



Series of seminar



→ Peter van Kranenburg
(KNAW, The Netherlands)

→ Save the date and join at
the link

→ February 8, 6pm CET

→ Abstract

The notion of melodic similarity has been studied in various fields, including ethnomusicology, Volkskunde, music cognition, and music information retrieval. In this presentation, we focus on the computational modelling of music similarity. After a introduction to the topic, highlighting the need for contextualization, I will briefly provide a historic overview of melody comparisons in folk music research and in music information retrieval. Next, I will present three recent computational approaches to measure melodic similarity: sequence alignment, n-gram modelling, and a twin neural network model.

→ Speaker biography

Peter van Kranenburg obtained master's degrees in Electrical Engineering (2003, Delft University of Technology) and Musicology (2004, Utrecht University). He developed machine-learning methods for studying musical authorship. As Ph.D. researcher at Utrecht University, he developed melodic similarity measures. At the Meertens Institute (Amsterdam) he contributed to the Database of Dutch Songs and conducted research on computational modelling of melody. Currently he is lecturer at Utrecht University, and researcher at the Meertens Institute (Amsterdam).