Name	Moreno Andreatta
Current Position	CNRS Director if Research at IRCAM Lab & USIAS
Affiliation	IRCAM Lab Paris & Univ. of Strasbourg Institut for Advanced Study

Academic Qualifications

Research Institut for Advanced Mathematics (IRMA) - Univ. Strasbourg
Habilitation Thesis (Thesis supervisors: Athanase Papadopoulos)   2010

EHESS & IRCAM, Paris
Ph.D., Algebraic Models in Music (Thesis supervisors: A. Poirier)   2003
Master, Computational Musicology (Thesis supervisor: M. Chemillier)   1999

University of Pavia and Conservatory of Novara
Four years Fellowship and Master in Algebra (Sup: S. Demichelis), Piano Diploma   1996, 1998

Research Interests

I work on the relations between mathematics and music, in particular on the algebraic, topological and categorical formalisation of musical structures, from a theorical, computational and epistemological perspective. These different tools have found recently their first applications in the domain of popular music studies, where I plan to put together my mathemusical researches and my interest for song writing and improvisation. This research is carried on at the present thanks to a fellowship from the USIAS (University of Strasbourg Institute for Advanced Study) and within the SMIR (Structural Music Information Research) project at IRMA (Institut de recherche mathématique avancée). Founding member of the Journal of Mathematics and Music, the official journal of the Society for Mathematics and Computation in Music (SMCM), I am co-editor (with Guerino Mazzola) of Springer "Computational Music Science Series" as well as (with Jean-Michel Bardez) the "Musique/Sciences" Series, published by IRCAM and Delatour France.

Awards

Fellow, University of Strasbourg Institute for Advanced Study   2017–2019
European Prize of the Marcel Bleustein-Blanchet Foundation for the vocation
(for research in mathematica and music)   2000
Fellowship of the Collegio Ghislieri at the University of Pavia   1991-1996

Selected Publications

Popoff A., M. Andreatta, A. Ehresmann (2017). Relational PK-Nets for Transformational Music Analysis. Journal of Mathematics and Music (in press)

Andreatta M., G. Baroin (2016). Formal and Computational Models in Popular Music. In Z. Kapoula (eds.), AEsthetics & Neurosciences: Scientific and Artistic Perspectives, Springer, p. 257-269.

Freund A., M. Andreatta, J.-L. Giavitto (2015). Lattice-based and Topological Representations of Binary Relations with an Application to Music. Annals of Mathematics and Artificial Intelligence, vol. 73, n° 3-4, p. 311-334

Bigo L., D. Ghisi, A. Spicher, M. Andreatta (2015). Representation of Musical Structures and Processes in Simplicial Chord Spaces. Computer Music Journal, vol. 39, n° 3, p. 9-24.

M. Andreatta (2015). Tiling Canons as a key to approach open Mathematical Conjectures ?. In E. Chew et al. (eds.), Mathemusical Conversations, Wiley, p. 86-104.

Bigo L., M. Andreatta (2015). Topological Structures in Computer-Aided Music Analysis. In D. Meredith (ed.), Computational Music Analysis, Springer, p. 57-80.