Record Nr. UNINA9910299238403321 Patterns of Intuition: Musical Creativity in the Light of Algorithmic **Titolo** Composition / / edited by Gerhard Nierhaus Pubbl/distr/stampa Dordrecht:,: Springer Netherlands:,: Imprint: Springer,, 2015 **ISBN** 94-017-9561-4 Edizione [1st ed. 2015.] Descrizione fisica 1 online resource (416 p.) 004 Disciplina 006.3 519 620 Soggetti Artificial intelligence **Physics** System theory Music Computational complexity Artificial Intelligence Applications of Graph Theory and Complex Networks Complex Systems Complexity Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references at the end of each chapters. Nota di contenuto Outline of the compositional structure(s) to be investigated -- The algorithms/procedures used -- Findings -- Improvisation in Trees --Electronic Music for an Acoustic Piano -- Forbidden Melodies -- The Semantics of a String Quartet -- Comments from renowned scientists from related research areas of Algorithmic Composition, Musicology, Artistic Research, Creativity. The present book is the result of a three year research project which Sommario/riassunto investigated the creative act of composing by means of algorithmic composition. Central to the investigation are the compositional

strategies of 12 composers, which were documented through a dialogic and cyclic process of modelling and evaluating musical materials. The

aesthetic premises and compositional approaches configure a rich spectrum of diverse positions, which is reflected also in the kinds of approaches and methods used. These approaches and methods include the generation and evaluation of chord sequences using genetic algorithms, the application of morphing strategies to research harmonic transformations, an automatic classification of personal preferences via machine learning, and an application of mathematical music theory to the analysis and resynthesis of musical material. The second part of the book features contributions by Sandeep Bhagwati, William Brooks, David Cope, Darla Crispin, Nicolas Donin, and Guerino Mazzola. These authors variously consider the project from different perspectives, offer independent approaches, or provide more general reflections from their respective research fields.