1. Record Nr. UNISA996546837003316 Autore Zheng Linshujie Titolo Classification of Musical Objects for Analysis and Composition [[electronic resource] /] / by Linshujie Zheng, Guerino Mazzola Pubbl/distr/stampa Cham: .: Springer International Publishing: .: Imprint: Springer. . 2023 **ISBN** 3-031-30183-8 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (156 pages) Collana Computational Music Science, , 1868-0313 Altri autori (Persone) MazzolaGuerino Disciplina 781.2012 Soggetti Mathematics—Data processing Mathematics Music Computational Mathematics and Numerical Analysis Applications of Mathematics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Part I Initial Orientation -- 1 The Basic Problem of Classification -- Part II General Formal Concepts -- 2 Ontology, Oniontology, and Creativity -- 3 Formal Representation of Musical Structures -- 4 Denotators over General Categories -- 5 Composition Denotators and Classification --6 Gestural Denotators: A First Overview -- 7 The Escher Theorem for Compositions and Gestures -- Part III Local Classification -- 8 Local Composition and Gesture Classification -- 9 Classification of Chords --10 Motif Classes -- 11 Third Chain Classes -- 12 Harmony through Third Chains -- 13 Counterpoint Worlds -- 14 Strong Interval Dichotomies -- 15 Microtonal Contrapuntal Theories -- 16 Dodecaphonic Rows -- Part IV Global Classification -- 17 Global Composition and Gesture Classification -- 18 The Classification Theorem for Global Compositions -- 19 The Classification Problem of Global Gestures -- 20 Singular Homology of Hypergestures -- 21 Local Gestures, Structures of Knots, and Local Gestures as Local Compositions -- Part V Classification and Creativity -- 22 Gestural Interpretation and Future Developments -- Part VI References, Index --

23 Classification Lists.

Sommario/riassunto

This book presents and discusses the fundamental topic of classification of musical objects, such as chords, motifs, and gestures. Their classification deals with the exhibition of isomorphism classes. Our structure types include local and global constructions, the latter being similar to global structures in geometry, such as differentiable manifolds. The discussion extends to the role, which classification plays for the creative construction of musical compositions. Our examples include references to classical compositions, such as Beethoven's sonatas, and some of the author's own compositions of classical and jazz styles. We also discuss software that enables the application of classification to musical creativity. The volume is addressed to an audience that would apply classification to programming and creative musical construction.