1. Record Nr. UNINA9910366619203321 Autore Ziemer Tim Titolo Psychoacoustic Music Sound Field Synthesis: Creating Spaciousness for Composition, Performance, Acoustics and Perception / / by Tim Ziemer Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2020 **ISBN** 3-030-23033-3 Edizione [1st ed. 2020.] Descrizione fisica 1 online resource (320 pages) Collana Current Research in Systematic Musicology, , 2196-6966; ; 7 Disciplina 612.85 780.721 Soggetti Acoustical engineering Music Acoustics **Engineering Acoustics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Introduction -- Spatial Concepts of Music -- Biology of the Auditory Nota di contenuto System -- Psychoacoustics -- Spatial Sound of Musical Instruments --Spatial Acoustics -- Conventional Stereophonic Sound -- Wave Field Synthesis -- Psychoacoustic Sound Field Synthesis. This book provides a broad overview of spaciousness in music theory. Sommario/riassunto from mixing and performance practice, to room acoustics, psychoacoustics and audio engineering, and presents the derivation, implementation and experimental validation of a novel type of spatial audio system. Discussing the physics of musical instruments and the nature of auditory perception, the book enables readers to precisely localize synthesized musical instruments while experiencing their timbral variance and spatial breadth. Offering interdisciplinary insights for novice music enthusiasts and experts in the field of spatial audio, this book is suitable for anyone interested in the study of music and musicology and the application of spatial audio mixing, or those seeking an overview of the state of the art in applied psychoacoustics

for spatial audio. .