Record Nr. UNINA9910451723403321 Autore Damaske Peter Titolo Acoustics and hearing [[electronic resource] /] / Peter Damaske Berlin; ; New York, : Springer, c2008 Pubbl/distr/stampa **ISBN** 1-281-51319-9 9786611513191 3-540-78229-X Edizione [1st ed. 2008.] Descrizione fisica 1 online resource (128 p.) Disciplina 620.2 784.2 Soggetti Music - Acoustics and physics Sound - Reverberation Electronic books. 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 (p. [117]-118) and index. Nota di contenuto Head-Related Sound from Two Loudspeakers -- Head-Related Stereophony -- The Hearing Process in Concert Halls -- Powerful Onset of Reverberation -- Definition of Diffuseness -- Theory of Drift Thresholds -- Loudness and Diffuseness. When one listens to music at home, one would like to have an acoustic Sommario/riassunto impression close to that of being in the concert hall. Until recently this meant elaborate multi-channelled sound systems with 5 or more speakers. But head-related stereophony achieves the surround-sound effect in living rooms with only two loudspeakers. By virtue of their slight directivity as well as an electronic filter the limitations previously common to two-speaker systems can be overcome and this holds for any arbitrary two-channel recording. The book also investigates the question of how a wide and diffuse sound image can arise in concert halls and shows that the quality of concert halls decisively depends on diffuse sound images arising in the onset of reverberation. For this purpose a strong onset of reverberation is modified in an anechoic chamber by electroacoustic means. Acoustics and Hearing proposes

> ideas concerning signal processing in the auditory system that explain the measured results and the resultant sound effects pleasing to the