1. Record Nr. UNINA9911019253003321 Autore Bech Sren Titolo Perceptual audio evaluation: theory, method and application // Sren Bech, Nick Zacharov Chichester, England;; Hoboken, NJ,: John Wiley & Sons, c2006 Pubbl/distr/stampa **ISBN** 9786610741236 9781280741234 1280741236 9780470869253 0470869259 9780470869246 0470869240 Descrizione fisica 1 online resource (464 p.) Altri autori (Persone) ZacharovNick Disciplina 621.389/33 Soggetti Sound - Recording and reproducing High-fidelity sound systems - Testing Sound - Measurement Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Includes bibliographical references (p. 389-434) and index. Nota di bibliografia Perceptual Audio Evaluation-Theory, Method and Application; Contents; Nota di contenuto Preface; Organisation of the Book; Acknowledgments; 1 Introduction; 1.1 Motivation for Listening Tests; 1.2 Role of Standardisation; 1.3 Role of Predictive Models: I Experimental Considerations: 2 Definition of Research Question and Hypothesis; 2.1 Principle of Empiricism; 2.2 Principle of Rationalism; 2.3 Other Principles of Scientific Argumentation; 2.3.1 Probabilistic Reasoning; 2.3.2 Argumentum ad Hominem; 2.3.3 Conclusion by Analogy; 2.4 Summary; 3 Fundamentals of Experimentation; 4 Quantification of Impression 4.1 Response Attribute4.1.1 Perceptual Measurements: 4.1.2 Affective Measurements; 4.2 Response Format; 4.2.1 Direct Scaling; 4.2.2 Indirect Scaling; 4.2.3 Selection of an Appropriate Scaling Procedure; 4.2.4 Context and Bias Effects; 4.2.5 Other Bias Effects; 4.3 Overview of Process; 5 Experimental Variables; 5.1 Signal; 5.1.1 Signal Category;

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## Sommario/riassunto

As audio and telecommunication technologies develop, there is an increasing need to evaluate the technical and perceptual performance of these innovations. A growing number of new technologies (e.g. low bit-rate coding) are based on specific properties of the auditory system, which are often highly non-linear. This means that the auditory quality of such systems cannot be measured by traditional physical measures (such as distortion, frequency response etc.), but only by perceptual evaluations in the form of listening tests. Perceptual Audio Evaluation provides a comprehen