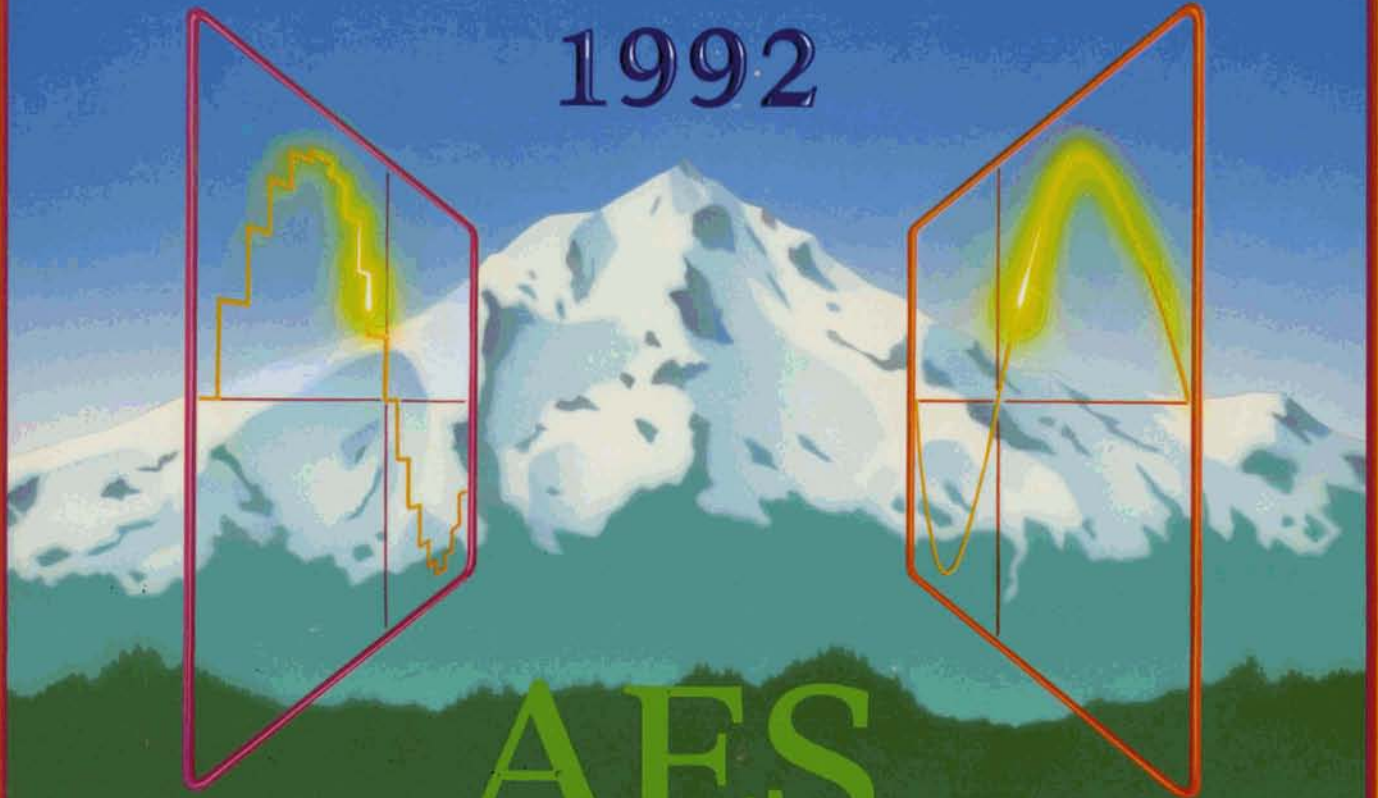


Proceedings of the 11th
International AES Conference

PORTLAND, OREGON

1992



AES

**TEST & MEASUREMENT
CONFERENCE**

29th-31st May, 1992 Portland, Oregon, USA
Chairman: Richard Cabot

Electronic Measurements Introduction



I am privileged to chair the AES 11th International Conference, Audio Test and Measurement. The conference is the first the AES has sponsored on the topic, and is particularly timely for the start of the 1990s. The audio industry has undergone significant changes in the transition to digital technology. The advent of digital audio brought several new impairments which necessitated changes in test techniques. However, the recent shift to digital data reduction systems has much more seriously challenged the way we quantify equipment and how we assess its audible quality.

There has always been a dichotomy between the practitioners of objective measurement and subjective measurement. The two sides sometimes refer to each other with the slightly derogatory terms "meter readers" and "golden ears." Many of the papers in this conference bridge the gap between these two camps and should greatly advance the science of audio measurement.

Measurements are necessary to quantify and compare products for selection between competing units. They are also necessary as a quality assurance tool for manufacturers and users of audio equipment. The impossibility of extensively listening to every piece of audio equipment manufactured worldwide before shipment requires that manufacturers find objective ways to quantify the important characteristics which can then be measured in an automated manner.

The papers in this conference cover aspects of all these areas. The first part of the session on subjectively relevant objective assessment, organized and chaired by Louis Fielder, examines the quantification of sound systems and acoustical spaces. The second part deals with audible defects in rate-reduced audio, the newest technologies for measurement and some results of measurements, both objective and subjective, on commercial systems. Bruce Hofer's session on electronic measurements focuses on new technology for measuring electronic and magnetic devices. Special attention is given to high-speed production test techniques. The digital measurements session, chaired by Stanley Lipshitz, deals with the generation of test signals for digital audio devices. The acoustical measurements session chaired by Vance Dickason provides a cross section of transducer and room acoustics test technology. The papers cover both the engineering and production aspects of testing and include several papers on state-of-the-art techniques not described before.

I have been privileged to work with an excellent organizing committee both in obtaining quality papers and in insuring a successful event. The authors, session chairmen, and committee members have all contributed many hours of labor simply because they believed in the idea of the conference. Special thanks go to Wayne Jones for following up on numerous details, all of which had infinitely short time lines.

A handwritten signature in black ink that reads "Richard C. Cabot". The signature is written in a cursive, flowing style.

RICHARD C. CABOT
CHAIRMAN

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