

 SAGE journals
This journal is moving.
Visit our Platform Migration
Information portal.
[Learn more >>](#) 

Search all journals 

- [Advanced Search](#) ▶
- [Search History](#) ▶
- [Browse Journals](#) ▶

[Advanced Journal Search](#) »

Ranking: 2015 SJR (SCImago Journal Rank) Score: 0.373 | 67/269 Building and Construction | 21/81 Acoustics and Ultrasonics | 262/718 Mechanical Engineering (Scopus®); Ranking: 2015 SJR (SCImago Journal Rank) Score: 0.357 | 100/943 History | 70/126 Accounting (Scopus®) Indexed in Emerging Sources Citation Index (ESCI): a new index in the Web of Science (TM) Core Collection

General Theory of the Energy Relations in Halls with Asymmetrical Absorption

1. [Higini Arau](#)

1. *Estudi Acustic H. Arau C/Travesera de Dalt 118, 3^{ra}. Barcelona (08024), Spain.*

Abstract

In this paper we describe a method of calculation of the energy relations in halls where the existence of a non-uniform distribution of absorptive material in the room results in a non-diffuse sound field. The cases of halls used for concerts and speech have both been treated in order to derive new energy relations that yield known expressions when applied to a diffuse sound field. The importance of the initial reverberation time corresponding to the first portion of the decay has been verified showing that the main subjective parameters relating to the sound energy are influenced strongly by this portion, which is called the Early Decay Time if it is measured in the first 10 dB of the decay.

- Received June 20, 1996.
- Accepted November 18, 1998.