

Envelopment: What is it? A definition for multichannel audio

R Conetta, P J B Jackson, S Zielinski, F Rumsey

Abstract

The spatial attribute envelopment has long been considered an important property of excellent concert hall acoustics. In the past, research in this area has produced the definition listener envelopment (LEV) and several equations designed to predict it.

However with the recent development of multichannel audio systems capable of positioning sound sources all around the listener, it is apparent that the attribute is not so easily defined and that a more appropriate definition may be needed. This poster introduces a definition of envelopment more appropriate for multichannel audio and outlines a recent pilot experiment conducted by the authors.