



Direction of [Phantom sources](#) - Stereo loudspeaker signals - 2 Interchannel level differences and interchannel time differences

From: Helmut Wittek, Günther Theile, "The Recording Angle - Based on Localisation Curves", 112th Convention 2002, Munich: http://www.hauptmikrofon.de/HW/AES112_Wittek_Theile.pdf

UdK Berlin
Sengpiel
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Tutorium

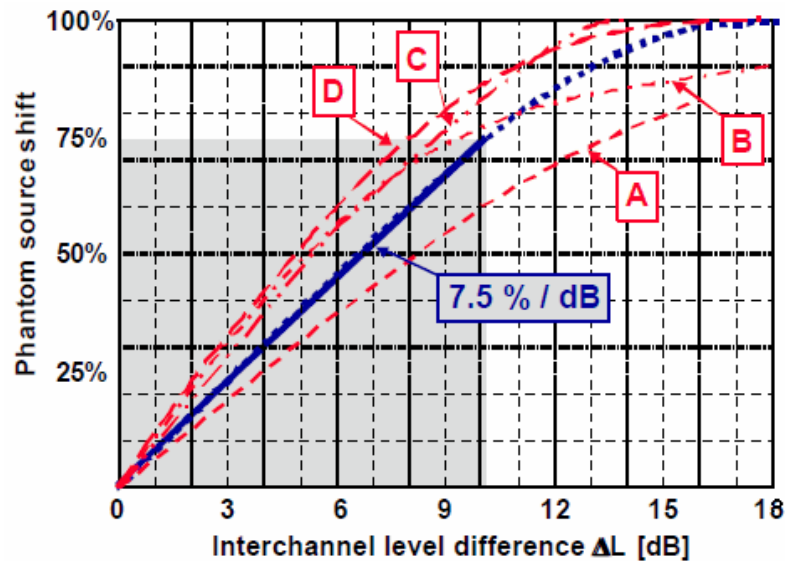


Fig. 1: Relative phantom sound source shift $A_{\Delta L} = f(\Delta L)$
(dotted thick curve after Wittek [1]) and center shift factor $Z_{\Delta L} = 7.5 \% / \text{dB}$ (thick line)
Curve A: After Leakey [2]
Curve B: After Mertens [3]
Curve C: After Brittain and Leakey [4]
Curve D: After Simonson [5]

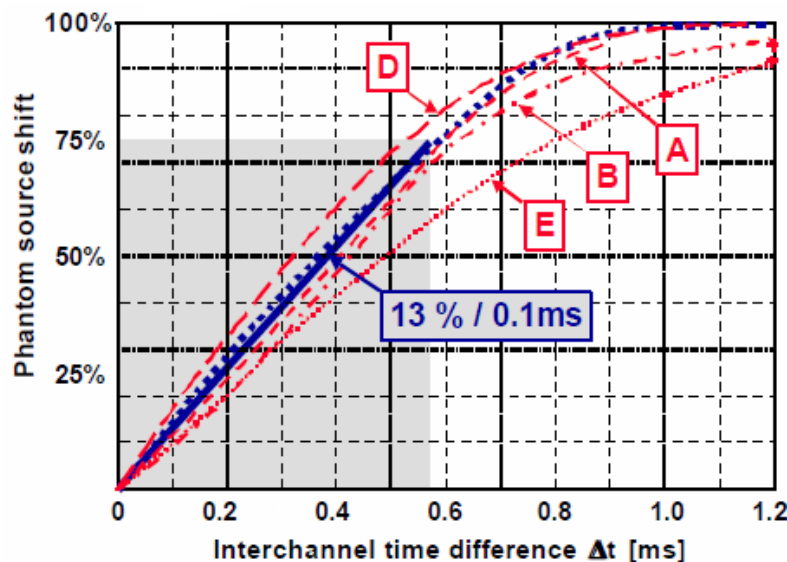


Fig. 2: Relative phantom sound source shift $A_{\Delta t} = f(\Delta t)$
dotted thick curve after Wittek and center shift factor $Z_{\Delta t} = 13 \% / 0.1 \text{ ms}$ (thick line)
Curve A: After Leakey [2]
Curve B: After Mertens [3]
Curve D: After Simonson [5]
Curve E: After Sengpiel [6]

<http://www.sengpielaudio.com/InterchannelLevelDifferencesAndInterchannelTimeDifferences1.pdf>

Sengpiel - Level Difference Curve: <http://www.sengpielaudio.com/HoerereignRichtungDL.pdf>

Sengpiel - Time Difference Curve: <http://www.sengpielaudio.com/HoerereignRichtungDt.pdf>