

- **PSY-03-006-IP**

Cue plausibility determines cue salience when localizing wideband virtual sounds

Frederic Wightman and Doris Kistler
Waisman Center, University of Wisconsin-Madison
573 Waisman Center 1500 Highland Ave.
WI 53705 Madison, USA
Phone=608-263-3270
Fax=608-263-2918.
email=wightman@waisman.wisc.edu

Although interaural time difference (ITD) is normally the primary determinant of the apparent lateral position of wideband sounds, the experiment reported here describes conditions in which ITDs are ignored. Listeners judged the azimuth of wideband noises, synthesized using individualized HRTFs to simulate frontal sources on the horizontal plane. In some conditions interaural time difference cues were manipulated to signal different directions in different frequency regions, something that would rarely occur in everyday life. In those conditions, even if only the high-frequency ITD cues were disparate, listeners always indicated an apparent source direction consistent with the spectral cues.