Ensemble statistics of active and reactive sound intensity in reverberation rooms - DTU Orbit (21/01/2019)

**Ensemble statistics of active and reactive sound intensity in reverberation rooms**
This paper examines fundamental statistical properties of the active and reactive sound intensity in reverberant enclosures driven with pure tones. The existing theory for sound intensity in a diffuse sound field, which is based on Waterhouse's random wave model and therefore limited to the region of high modal overlap, is extended to the region of low modal overlap by taking account of the random fluctuations of the sound power emitted by the source that generates the sound field. The validity of the extended model is confirmed by experimental and numerical results.

**General information**
State: Published
Organisations: Acoustic Technology, Department of Electrical Engineering, University of Vigo
Contributors: Jacobsen, F., Molares, A. R.
Pages: 211-218
Publication date: 2011
Peer-reviewed: Yes

**Publication information**
Volume: 129
Issue number: 1
ISSN (Print): 0001-4966
Ratings:
BFI (2019): BFI-level 2
Web of Science (2019): Indexed yes
BFI (2018): BFI-level 2
Web of Science (2018): Indexed yes
BFI (2017): BFI-level 2
Scopus rating (2017): CiteScore 1.77 SJR 0.695 SNIP 1.224
Web of Science (2017): Impact factor 1.605
Web of Science (2017): Indexed yes
BFI (2016): BFI-level 2
Scopus rating (2016): CiteScore 1.83 SJR 0.819 SNIP 1.271
Web of Science (2016): Impact factor 1.547
Web of Science (2016): Indexed yes
BFI (2015): BFI-level 2
Scopus rating (2015): CiteScore 1.77 SJR 0.854 SNIP 1.416
Web of Science (2015): Impact factor 1.572
Web of Science (2015): Indexed yes
BFI (2014): BFI-level 2
Scopus rating (2014): CiteScore 1.8 SJR 0.887 SNIP 1.402
Web of Science (2014): Impact factor 1.503
Web of Science (2014): Indexed yes
BFI (2013): BFI-level 2
Scopus rating (2013): CiteScore 2 SJR 0.707 SNIP 1.937
Web of Science (2013): Impact factor 1.555
ISI indexed (2013): ISI indexed yes
Web of Science (2013): Indexed yes
BFI (2012): BFI-level 2
Scopus rating (2012): CiteScore 1.75 SJR 0.771 SNIP 1.619
Web of Science (2012): Impact factor 1.646
ISI indexed (2012): ISI indexed yes
Web of Science (2012): Indexed yes
BFI (2011): BFI-level 2
Scopus rating (2011): CiteScore 1.68 SJR 0.686 SNIP 1.624
Web of Science (2011): Impact factor 1.55
ISI indexed (2011): ISI indexed yes
Web of Science (2011): Indexed yes
BFI (2010): BFI-level 2
Scopus rating (2010): SJR 0.734 SNIP 1.511
Web of Science (2010): Impact factor 1.644
Web of Science (2010): Indexed yes
BFI (2009): BFI-level 2
Scopus rating (2009): SJR 0.778 SNIP 1.692
Web of Science (2009): Indexed yes
BFI (2008): BFI-level 2
Scopus rating (2008): SJR 0.83 SNIP 1.657
Web of Science (2008): Indexed yes
Scopus rating (2007): SJR 0.838 SNIP 1.635
Web of Science (2007): Indexed yes
Scopus rating (2006): SJR 0.739 SNIP 1.678
Web of Science (2006): Indexed yes
Scopus rating (2005): SJR 0.946 SNIP 1.728
Web of Science (2005): Indexed yes
Scopus rating (2004): SJR 0.77 SNIP 1.761
Web of Science (2004): Indexed yes
Scopus rating (2003): SJR 0.875 SNIP 1.695
Web of Science (2003): Indexed yes
Scopus rating (2002): SJR 0.785 SNIP 1.572
Web of Science (2002): Indexed yes
Scopus rating (2001): SJR 0.727 SNIP 1.483
Web of Science (2001): Indexed yes
Scopus rating (2000): SJR 0.639 SNIP 1.404
Web of Science (2000): Indexed yes
Scopus rating (1999): SJR 0.56 SNIP 1.306
Original language: English
DOIs: 10.1121/1.3514425
Source: orbit
Source-ID: 275088
Research output: Research - peer-review › Journal article – Annual report year: 2011