

Danish Primary Laboratory of Acoustics

List of publications from 2004 - 2008

1. Refereed publications

S. Barrera Figueroa, F. Jacobsen, and K. Rasmussen, A note on determination of the diffuse-field sensitivity of microphones using the reciprocity technique, *Journal of the Acoustical Society of America* **124**, pp 1505-1512 (2008).

S. Barrera Figueroa, K. Rasmussen, and F. Jacobsen, On experimental determination of the free-field correction of laboratory standard microphones at normal incidence, *Metrologia* **44**, pp 57-63 (2007).

S. Barrera Figueroa, F. Jacobsen, and K. Rasmussen, On experimental determination of the random-incidence response of microphones, *Journal of the Acoustical Society of America* **121**, pp 2628-2636 (2007).

S. Barrera-Figueroa, L. Nielsen, and K. Rasmussen Report on the Regional Comparison COOMET.AUV.A-K3, *Metrologia* **44** 09002 doi:10.1088/0026-1394/44/1A/09002, 2007.

S. Barrera-Figueroa, L. Nielsen, and K. Rasmussen, Report on the bilateral comparison between DPLA-DFM and NPLI, *Metrologia* **44** 09005 doi:10.1088/0026-1394/44/1A/09005, 2007.

V. Cutanda-Henríquez, and K. Rasmussen, Final report on the Key Comparison CCAUV.A-K3, *Metrologia* **43**, 09001 (2006).

S. Barrera Figueroa, K. Rasmussen, and F. Jacobsen, The acoustic center of laboratory standard microphones, *Journal of the Acoustical Society of America* **120**, pp 2668-2675 (2006).

S. Barrera-Figueroa, K. Rasmussen, F. Jacobsen, and L. Muñiz, On the interference between the two microphones in a free-field reciprocity calibration, *Journal of the Acoustical Society of America* **116**, pp. 2771-2778 (2004).

F. Jacobsen, S. Barrera Figueroa, and K. Rasmussen, A note on the concept of acoustic center, *Journal of the Acoustical Society of America* **115**, pp 1468-1473 (2004).

2. Conference papers

S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, *On the relation between the radiation impedance and the diffuse-field sensitivity*, Internoise 2008, Shanghai, China 2008.

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S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, *On determination of microphone response and other parameters by a hybrid experimental and numerical method*, Proceedings of the Joint Meeting Acoustics'08, Paris, France, ISBN: 978-2-9521105-4-9, EAN: 9782952110594, pp p. 1519-1524 (2008).

S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, *Calibration of microphones in a diffuse field*, Internoise 2007, Istanbul 2007.

E. Frederiksen, *Secondary microphone calibration methods and their associated uncertainties*, Internoise 2007, Istanbul 2007.

S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, *An initial investigation on simultaneous determination of the free-field and diffuse-field sensitivity of microphones*, 19th ICA, Madrid, 2007.

S. Barrera-Figueroa, V. Cutanda Henríquez, F. Jacobsen, and K. Rasmussen, *A numerical study of the random-incidence and diffuse-field sensitivity of Laboratory Standard microphones using BEM*, proceedings of the 33rd International Acoustic Conference, EAA Symposium, High Tatras, Slovakia, 2006.

T. R. Licht, and S. E. Salboel, *ISO 16063-11: Primary vibration calibration by laser interferometry. Evaluation of sine approximation realised by FFT*. XVIII IMEKO WORLD CONGRESS, Metrology for a Sustainable Development, September, 17 – 22, 2006, Rio de Janeiro, Brazil

S. Barrera Figueroa, F. Jacobsen, and K. Rasmussen, *The random incidence sensitivity of measurement microphones*, Thirteenth International Congress on Sound and Vibration, Vienna, Austria, 2006.

E. Frederiksen, *The Infra-sound calibration of measurement microphones*, Thirteenth International Congress on Sound and Vibration, Vienna, Austria, 2006.

S. Barrera-Figueroa, K. Rasmussen, F. Jacobsen: *The free-field correction of laboratory standard microphones*. Proceedings of the Twelfth International Congress on Sound and Vibration, Lisbon, Portugal, 2005.

S. Barrera Figueroa, K. Rasmussen, F. Jacobsen, L. Muñiz, and V. Cutanda-Henríquez, *Interferencia de ondas acústicas en la calibración primaria de micrófonos por reciprocidad en campo libre*, Simposio de Metrología, CENAM, Querétaro, México, 2004.

3. Other talks and reports

V. Cutanda-Henriquez, P. M. Juhl, S. Barrera-Figueroa, Improvements on the directional characteristics of a calibration sound source using the Boundary Element Method (A), *Journal of the Acoustical Society of America* **123**, pp. 3421 (2008).

K. Rasmussen, and S. Barrera-Figueroa, Free-field reciprocity calibration of laboratory standard (LS) microphones using a time selective technique (A), *Journal of the Acoustical Society of America* **120**, pp. 3232 (2006).

T. R. Licht and S. E. Salboel, *New system for realising the sine approximation method in ISO 16063-11*, Primary vibration calibration by laser interferometry. NCSLI, Nashville, TN, USA, august 2006 (Poster session).