

Danish Primary Laboratory of Acoustics

List of publications from 2006 - 2010

1. Refereed publications

S. Barrera-Figueroa, L. Nielsen, K. Rasmussen, A. E. Pérez-Matzumoto, and J. N. Razo-Razo Final report on the key comparison CCAUV.A-K4, *Metrologia* **47** 09003 doi: 10.1088/0026-1394/47/1A/09003 (2010).

S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, Radiation impedance of condenser microphones and their diffuse-field response, *Journal of the Acoustical Society of America* **127**, pp 2290-2294 (2010).

S. Barrera-Figueroa, F. Jacobsen, and K. Rasmussen, Hybrid method for determining the parameters of condenser microphones from measured membrane velocities and numerical calculations, *Journal of the Acoustical Society of America* **126**, pp 1788-1795 (2009).

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.

Conference papers

S. Barrera-Figueroa, G. Moreno-Pescador, F. Jacobsen, K. Rasmussen, V. Cutanda-Henriquez, and P. Møller-Juhl, *An investigation on methods for free-field comparison calibration of measurement microphones*, Internoise 2010, Lisbon, Portugal 2010.

A. Torras-Rosell, and F. Jacobsen, *Measuring long impulse responses with pseudorandom sequences and sweep signals*, Internoise 2010, Lisbon, Portugal 2010.

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S. Barrera-Figueroa, M. Diaz-Ben, and F. Jacobsen, *Pressure calibration of microphones in a free field*,

E. Frederiksen, *Turnkey free-field reciprocity system for primary microphone*, Internoise 2009, Ottawa, Canada 2009.

T. Licht and S. E. Salbøl, ISO 16063-11: *Uncertainties in Primary Vibration Calibration by Laser Interferometry. Reference Planes and Transverse Motion*, IMEKO XIX (2009).

W.S. Cheung and T. Licht, *Progress in Development of Calibration Systems for Angular Vibration Pickups*, IMEKO XIX (2009).

V. Cutanda-Henriquez, P. Møller, and S. Barrera-Figueroa, *Numerical design and testing of a sound source for secondary calibration of microphones using the Boundary Element Method*, Proceedings of the International Conference on Acoustics NAG/DAGA 2009. Rotterdam, the Netherlands 2009.

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.

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, Turkey 2007.

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

Torben R. Licht and S. E. Salboel, ISO 16063-11: *Primary vibration calibration by laser interferometry: Evaluation of sine approximation realised by FFT*, IMEKO XVIII, Rio de Janeiro, Brazil 2006.

2. Other reports, chapters in books and talks

R. G. Barham, K. Rasmussen, T. Fedtke, D. Rodrigues, and T. Zmierczak, Measurement of the acoustical impedance of artificial ears (a report on EURAMET project 791), NPL Report AC-6, The National Physical Laboratory, Teddington, United Kingdom (2008).

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).

E. Frederiksen, Phase Frequency Responses of Measurement Microphones and their Calibration, 156th ASA-meeting, Miami, USA (2008).

E. Frederiksen, *Condenser microphones*, Handbook of Signal Processing in Acoustics, D. Havelock, S. Kuwano, M. Vorländer (Eds.), Springer Verlag, ISBN: 978-0-387-77698-9 (2008).

E. Frederiksen, *Microphone calibration*, Handbook of Signal Processing in Acoustics, D. Havelock, S. Kuwano, M. Vorländer (Eds.), Springer Verlag, ISBN: 978-0-387-77698-9 (2008).