

CONTACT INFORMATION

Dept. of Mechanical and Production Engineering
Aarhus University
Inge Lehmanns gade 10
DK-8000 Aarhus C, Denmark
ORCID ID:

Mobile: +45-2912 5815
E-mail: abra@mpe.au.dk
URL: mpe.au.dk
0000-0003-2025-7842
URL: www.abravibe.com

SHORT DESCRIPTION

I am a dedicated leader, researcher and educator with over 30 years experience from both industry and academia. I am driven by a desire to enable young students and researchers to grow to their maximum abilities, and I also enjoy stimulating colleagues to achieve that little extra. After a 20-year career in industry, the last twelve years I have devoted to building a research group at SDU, that is working on improving reliability in renewable energy production. Since December 2019 I am also Vice Head of SDU Mechanical Engineering, with responsibility for research. My main current research interest is trying to improve damping estimates in operational modal analysis. This is important for structural health monitoring, but also for design against fatigue, and for obtaining accurate simulation of vibration levels in wind turbines, buildings, ships, etc.

RESEARCH INTERESTS

Noise and vibration analysis, experimental modal analysis, operational modal analysis, structural health monitoring, vibration based condition monitoring, signal analysis, spectrum estimation, system identification, nonlinear vibration analysis, experimental fatigue analysis

EDUCATION

Chalmers University of Technology, Göteborg, Sweden

Licentiate of Engineering, Medical Electronics, 1989

Thesis: ‘*On Sound Transmission Characteristics of the Human Skull in vivo*,’
Chalmers Technical Report No. 61L, 1989, 74 pages.

Master of Science, Electrical Engineering, 1986

Thesis: ‘*Motion compensated interpolation*’

POSITIONS

Professor, Head of Dept. of Mechanical and Production Engineering
Aarhus University, Denmark

2021 – present

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|---|--------------------|
| Professor, Vice Head of Mechanical Engineering University of Southern Denmark, Odense, Denmark | 2019 – 2021 |
| Associate Professor University of Southern Denmark, Odense, Denmark | 2009 – 2019 |
| Guest Professor (20%) Linnaeus University, Växjö, Sweden | 2016 – 2018 |
| Co-Founder, President, and CEO Axiom EduTech, Sweden | 1996 – 2008 |
| Sales Manager, etc. Measurement Systems Scandinavia, Sweden | 1992 – 1996 |
| CEO and Regional Sales Manager LMS Scandinavia, Sweden | 1990 – 1991 |
| Applications Specialist LMS Scandinavia, Sweden | 1989 – 1990 |

ADMINISTRATIVE POSITIONS

| | |
|---|-----------------------|
| Elected member, SDU Technical Faculty Academic Council | 2011 – 2016 |
| Appointed member, Educational Board for master's program in Structural Engineering | 2012 – present |

TEACHING EXPERIENCE

University of Southern Denmark¹

| | |
|--|-----------------------|
| Structural Dynamics | 2014 – present |
| Control Engineering (Energy technology, bachelor level) | 2012 |
| Programming and Numerical Analysis | 2011 – 2014 |
| Experimental Vibration Analysis | 2011 – present |
| Automation and Control Engineering (Mech. Eng., bachelor level) | 2009 – 2013 |
| Mechanical Vibrations | 2009 – 2017 |
| PhD course 'Experimental Structural Dynamics and Model Validation' | 2017 |

Politecnico di Milano, Italy

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| PhD course 'Experimental Structural Dynamics for Model Validation' | 2017 |
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Royal Institute of Technology, Stockholm, Sweden

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| PhD course 'Advanced Structural Dynamics, Modelling and Measurements' | 2006, 2011, 2015, 2019 |
| Co-organizer and co-lecturer | |

Blekinge Institute of Technology¹

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| Ph.D. course on Nonlinear System Identification | 2007 |
| Introductory Noise and Vibration Analysis | 1998 – 2006 |
| Experimental Modal Analysis | 1998 – 2006 |
| Advanced Signal Analysis in Vibration Applications | 1998 – 2006 |

¹Master's level unless specified

Luleå Technical University
Ph.D. course on Experimental Modal Analysis **2004**

International Modal Analysis Conference (IMAC)
Pre-conference course:
'Using MATLAB for Noise and Vibration Analysis' **2003 – present**
(Not run every year, but most)

Industry Short-Courses
Over 250 short-courses **1989 – present**
Experimental vibration analysis, acoustics,
modal analysis, vibration testing

Chalmers University of Technology¹
Analog and Digital Signal Processing **1987 – 1988**
Assistant teacher
Analog Circuit Design **1986 – 1988**
Assistant teacher

INVITED KEYNOTE SPEAKER

22nd International Conference on Mechanical Engineering, Ahvaz, Iran **April 2014**

PRIOR AND CURRENT PHD STUDENTS

| | |
|--|---------------------------------|
| Åsa Bolmsvik, Linnaeus University (unofficial assistant supervisor) | Mar 2013 |
| Kirsi Jarnerö, Linnaeus University (unofficial assistant supervisor) | Nov 2014 |
| Till Köder, SDU (assistant supervisor) | Jan 2015 |
| Esben Orlowitz, SDU | Dec 2015 |
| Michael Andersen, SDU | March 2018 |
| Michael Krentzel, SDU (assistant supervisor) | June 2019 |
| Silas Sverre Christensen | Aug 2020 |
| Karsten Krautwald Vesterholm | June 2021 |
| Goran Jelcic | June 2022 |
| Jonas Gad Kjeld | June 2022 |
| Jesper Berntsen | March 2019 – present |
| Martin Suuhr | September 2021 – present |

MSc STUDENTS

31 graduated M.Sc. students **2010 – 2019**

RESEARCH FUNDING

Linnaeus University cooperation **2009 – 2013**
Linnaeus university paid for collaboration where my
expertise in experimental modal analysis was used

for research on wood constructions.

Funding: 100,000 DKK (EUR 13k) per year

Interreg4a, FastLabNet, ‘Danish–German Maritime Network
for Fatigue Analysis’ **2011 – 2014**

Cooperation between Fachhochschule Kiel and University of
Southern Denmark (SDU),

Funding: Approx. 550,000 EUR total; 250,000 EUR in SDU part.

TREFOR, ‘Development of a Measurement Robot’, **2016**
Grant: 431,000 DKK

Interreg5a, Reliables Offshore, **2017 – 2019**

Cooperation between Fachhochschule Kiel and University of
Southern Denmark (SDU)

Funding: Approx. 480,000 EUR total budget; 200,000 EUR in SDU part.

MUDP (Danish environmental research fund) **2017 – 2019**

Cooperation between Dinex A/S and University of Southern Denmark

Funding: Approx. 750,000 DKK

Danish Maritime Fund **2018 – 2019**

PostDoc project ‘Vibrations in large containerships’,
cooperation with Mærsk Line,

Funding: Approx. 750,000 DKK

Innovation Fund Denmark **2018 – 2021**

Industrial PhD Project ‘Methodology for determination of
vibration damping of an offshore wind turbine supporting structure’

Funding: 360,000 DKK

Innovation Fund Denmark **2019 – 2022**

Industrial PhD Project ‘Experimental Fatigue Life Assessment
of a Full Scale Wind Turbine Test Bench’

Funding: 360,000 DKK

Innovation Fund Denmark **2020 – 2022**

Industrial PostDoc Project ‘Investigation into offshore
wind turbine vibrations’

Funding: 240,000 DKK

Innovation Fund Denmark **2021 – 2024**

Industrial PostDoc Project ‘Video-based measurements for validation of wind turbine dy-
namics’

Funding: 360,000 DKK

CONSULTING EXPERIENCE (SELECTED)

- Experimental modal analysis of train cars
- Experimental modal analysis of truck coolers
- Experimental modal analysis of automotive components
- Vibration environment analysis of a satellite
- Effects of vibration on drivers of trucks and buses
- Sound quality in fork lift cabin
- Analysis of vibrations in rock drills

- Non-contact vibration measurements on high voltage power lines
- Shock analysis of rifle laser sights
- Order tracking analysis of automotive engines
- Analysis of sewing machine noise and vibration
- Acoustic analysis of ship cabins
- Vibration analysis of paper mill machines
- Break squeal analysis of automobile breaks
- Vibration analysis in lathes
- Vibration analysis of grinding machine

PROFESSIONAL MEMBERSHIPS

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|---|-----------------------|
| International Conference on Structural Engineering Dynamics (ICEDyn) <i>Scientific Committee</i> | 2019 – present |
| International Ship & Offshore Structures Congress <i>Member, Committee II.2 Dynamic Loads</i> | 2015 – present |
| International Operational Modal Analysis Conference <i>Scientific Committee</i> | 2005 – present |
| Society for Experimental Mechanics, member | 1996 – present |
| Scandinavian Vibration Society, member | 1989 – 2017 |
| Scandinavian Vibration Society, work group <i>research and education</i> | 2004 – 2016 |
| Scandinavian Vibration Society, board member | 2012 – 2016 |
| Swedish Environmental Engineering Society, board member | 2004 – 2009 |
| Swedish Environmental Engineering Society, work group <i>Mechanical Environment</i> | 1998 – 2009 |

PUBLICATIONS

BOOKS AND BOOK CHAPTERS

- [1] Anders Brandt and Stefano Manzoni. Introduction to spectral and correlation analysis: Basic measurements and methods. In R. Allemang and Peter Avitabile, editors, *Handbook of Experimental Structural Dynamics*, pages 1–30. Springer New York, New York, NY, 2020.
- [2] A. Brandt and R. Singhal. *Shock & Vibration, Aircraft/Aerospace, Energy Harvesting, Acoustics & Optics, Volume 9*. Proc. of the 34th IMAC, A Conference and Exposition on Structural Dynamics 2016. Springer, 2016.
- [3] A. Brandt. *Noise and Vibration Analysis: Signal Analysis and Experimental Procedures*. John Wiley and Sons, 2011.
- [4] A. Brandt. *Noise & Vibration Analysis III*. Saven EduTech AB & Blekinge Institute of Technology, class notes, 2003.
- [5] A. Brandt. *Ljud- och vibrationsanalys I (Swedish)*. Saven EduTech AB & Blekinge Institute of Technology, class notes, 2001.
- [6] A. Brandt. *Introductory Noise & Vibration Analysis*. Saven EduTech AB & Blekinge Institute of Technology, class notes, 2000.

PEER-REVIEWED JOURNAL PAPERS

- [7] Jesper Berntsen, Anders Brandt, and Konstantinos Gryllias. Enhanced demodulation band selection based on operational modal analysis (oma) for bearing diagnostics. *Mechanical Systems and Signal Processing*, 181:109300, 2022.
- [8] Jesper Berntsen and Anders Brandt. Periodogram ratio based automatic detection and removal of harmonics in time or angle domain. *Mechanical Systems and Signal Processing*, 165:108310, 2022.
- [9] Mingming Song, Silas Christensen, Babak Moaveni, Anders Brandt, and Eric Hines. Joint parameter-input estimation for virtual sensing on an offshore platform using output-only measurements. *Mechanical Systems and Signal Processing*, 170:108814, 2022.
- [10] Michael Styrk Andersen, Mads Beedholm Eriksen, Søren Vestergaard Larsen, and Anders Brandt. The influence of gap- and chord-widths for multi-box girders: Superposition of flat plate flutter derivatives and section model tests. *Journal of Fluids and Structures*, 109:103489, 2022.
- [11] Goran Jelicic, Marc Böswald, and Anders Brandt. Improved computation in terms of accuracy and speed of LTI system response with arbitrary input. *Mechanical Systems and Signal Processing*, 150:107252, 2021.
- [12] Marius Tarpø, Christos Georgakis, Anders Brandt, and Rune Brincker. Experimental determination of structural damping of a full-scale building with and without tuned liquid dampers. *Struct Control Health Monit*, page e2676, December 2020.
- [13] Karsten Krautwald Vesterholm, Rune Brincker, and Anders Brandt. Random decrement technique for detection and characterization of nonlinear behavior. *Mechanical Systems and Signal Processing*, 143:106841, 2020.
- [14] M. Berardengo, J. Høgsberg, S. Manzoni, M. Vanali, A. Brandt, and T. Godi. LRLC-shunted piezoelectric vibration absorber. *Journal of Sound and Vibration*, 474:115268, May 2020.
- [15] A. Brandt. A signal processing framework for operational modal analysis in time and frequency domain. *Mechanical Systems and Signal Processing*, 115:380–393, January 2019.
- [16] A. Brandt, M. Berardengo, S. Manzoni, M. Vanali, and A. Cigada. Global scaling of operational modal analysis modes with the omah method. *Mechanical Systems and Signal Processing*, 117:52–64, February 2019.
- [17] Zhi Chao Ong, Hong Cheet Lim, Anders Brandt, Zubaidah Ismail, and Shin Yee Khoo. An inconsistent phase selection assessment for harmonic peaks elimination in operational modal testing. *Archive of Applied Mechanics*, 89(12):2415–2430, December 2019.
- [18] Zhi Chao Ong, HC Lim, and A Brandt. Implementation of phase controlled impact device for enhancement of frequency response function in operational modal testing. *Journal of the Franklin Institute*, 355:291–313, 2018.
- [19] M. S. Andersen, O. Øiseth, J. Johansson, and A. Brandt. Flutter derivatives from free decay tests of a rectangular $b/d=10$ section estimated by optimized system identification methods. *Engineering Structures*, 156:284–293, 2018.
- [20] Zhi Chao Ong, Hong Cheet Lim, and Anders Brandt. Automated impact device with non-synchronous impacts: a practical solution for modal testing during operation. *J. Zhejiang Univ-Sci A (Appl Phys & Eng)*, 19(6):452–460, 2018.
- [21] E. Orlowitz and A. Brandt. Comparison of experimental and operational modal analysis on a laboratory test plate. *Measurement*, 102:121 – 130, 2017.

- [22] A. Brandt, M. Berardengo, S. Manzoni, and A. Cigada. Scaling of mode shapes from operational modal analysis using harmonic forces. *Journal of Sound and Vibration*, 407:128–143, October 2017.
- [23] A Brandt. Some educational vibration measurement exercises. *Sound and Vibration*, 50(1):12 – 14, 2016.
- [24] M.S. Andersen, J. Johansson, A Brandt, and S.O. Hansen. Aerodynamic stability of long span suspension bridges with low torsional natural frequencies. *Engineering Structures*, 120:82 – 91, 2016.
- [25] Kirsi Jarnerö, Anders Brandt, and Anders Olsson. Vibration properties of a timber floor assessed in laboratory and during construction. *Engineering Structures*, 82:44 – 54, 2015.
- [26] A. Brandt and R. Brincker. Integrating time signals in frequency domain – comparison with time domain integration. *Measurement*, 58:511 – 519, 2014.
- [27] E. Orlowitz and A. Brandt. Operational modal analysis for dynamic characterization of a ro-lo ship. *Journal of Ship Research*, 58(4):216 – 224, 2014.
- [28] Åsa Bolmsvik, Andreas Linderholt, Anders Brandt, and Torbjörn Ekevid. FE modelling of light weight wooden assemblies – parameter study and comparison between analyses and experiments. *Engineering Structures*, 73:125–142, 2014.
- [29] A. Brandt, P.-O. Sturesson, and M. Ristinmaa. Test analysis verification exercise using open software. *Sound and Vibration*, June 2014.
- [30] A. Brandt. ABRIVIBE – A toolbox for teaching and learning vibration analysis. *Sound and Vibration*, 47(11):12 – 17, 2013.
- [31] Å. Bolmsvik and A. Brandt. Damping assessment of light wooden assembly with and without damping material. *Engineering Structures*, 49:434 – 447, 2013.
- [32] A. Brandt and K. Ahlin. Sampling and time-domain analysis. *Sound and Vibration*, 44(5):13–17, May 2010.
- [33] A. Brandt, K. Ahlin, and T. Lagö. Noise and vibration measurement system basics. *Sound and Vibration*, 40(4):9–11, April 2006.
- [34] A. Brandt, T. Lagö, K. Ahlin, and J. Tuma. Main principles and limitations of current order tracking methods. *Sound and Vibration*, 39(3):19–22, March 2005.
- [35] L. Andren, L. Hakansson, A. Brandt, and I. Claesson. Identification of motion of cutting tool vibration in a continuous boring operation – correlation to structural properties. *Mechanical Systems and Signal Processing*, 18(4):903–927, July 2004.
- [36] L. Andren, L. Hakansson, A. Brandt, and I. Claesson. Identification of dynamic properties of boring bar vibrations in a continuous boring operation. *Mechanical Systems and Signal Processing*, 18(4):869–901, July 2004.
- [37] K. Ahlin and A. Brandt. A smart way to analyze dynamic data. *Sound and Vibration*, 37(2):20 – 22, February 2003.
- [38] B. Håkansson, P. Carlsson, A. Brandt, and S. Stenfelt. Linearity of sound transmission through the human skull bone. *Journal of the Acoustical Society of America*, 99(4):2239 – 2243, 1996.
- [39] B. Håkansson, A. Brandt, P. Carlsson, and A. Tjellström. Resonance frequencies of the human skull *in vivo*. *Journal of the Acoustical Society of America*, 95(3):1474 – 1481, 1994.

CONFERENCE PAPERS

- [40] Jesper Berntsen and Anders Brandt. Preliminary results of vibration measurements on a wind turbine test bench. In Brandon Dilworth and Michael Mains, editors, *Topics in Modal Analysis & Testing, Volume 8*, pages 211–220. Springer International Publishing, 2021.
- [41] Jonas G. Kjeld and Anders Brandt. A Principle for Obtaining Pragmatic Uncertainty Bounds on Modal Parameters. In *Topics in Modal Analysis & Testing, Volume 8*, pages 31–39. Springer, 2021.
- [42] Saeed Shakibfar, Ingrid M. V. Andersen, and Anders Brandt. Vibration damping of large containership in operation. In Tetsuo Okada, Katsuyuki Suzuki, and Yasumi Kawamura, editors, *Practical Design of Ships and Other Floating Structures*, pages 321–329, Singapore, 2021. Springer Singapore.
- [43] Osama Abdeljaber, Michael Dorn, and Anders Brandt. Scaling an oma modal model of a wood building using omah and a small shaker. In *Topics in Modal Analysis & Testing, Volume 8*, pages 151–157. Springer, 2021.
- [44] Jesper Berntsen and Anders Brandt. Comparison of harmonic removal techniques for computing envelope spectra from rollingelement bearing vibrations. In *Proceedings of ISMA2020 International Conference on Noise and Vibration Engineering*, pages 591–596, 2020.
- [45] K. K. Vesterholm and A. Brandt. Localizing nonlinear behavior from response measurement. In *Proceedings of the International Conference on Noise and Vibration Engineering (ISMA)*, pages 2231–2238, 2020.
- [46] Karsten Krautwald Vesterholm, Tobias Friis, Evangelos Katsanos, Rune Brincker, and Anders Brandt. Output-only estimation of amplitude dependent friction-induced damping. In *Dynamics of Civil Structures, Volume 2*, pages 17–25. Springer, 2020.
- [47] Tobias Friis, Karsten K. Vesterholm, Evangelos I. Katsanos, Anders Brandt, and Rune Brincker. Identification of friction-coupled offshore platforms by output-only method. In *The 29th International Ocean and Polar Engineering Conference*, 2019.
- [48] S. S. Christensen and A. brandt. Time domain modal parameter estimation methods used in OMA a comparison. In *International Operational Modal Analysis Conference*, 2019.
- [49] K. K. Vesterholm, R. Brincker, and A. Brandt. Detection of nonlinear behavior using the random decrement technique. In *International Operational Modal Analysis Conference (IOMAC)*, 2019.
- [50] A. Brandt. Automatic detection and removal of harmonics in vibration signals. In *Proc. of the International Conference on Structural Engineering Dynamics (ICEDyn), Viana do Castelo, Portugal*, 2019.
- [51] S. S. Christensen and A. Brandt. Parameter study of statistics of modal parameter estimates using automated operational modal analysis. *Proceedings of the International Modal Analysis Conference*, 2019.
- [52] Silas S. Christensen, Michael S. Andersen, and Anders Brandt. Dynamic characterization of the little belt suspension bridge by operational modal analysis. In *Dynamics of Civil Structures, Volume 2*, pages 17–22. Springer, 2019.
- [53] Karsten Krautwald Vesterholm, Rune Brincker, and Anders Brandt. Linearization of modal parameters in Duffing oscillator using the random decrement technique. In *28th International Conference on Noise and Vibration Engineering (ISMA 2018)*, pages 2673–2686. ISMA, 2018.
- [54] S. S. Christensen and A. Brandt. Automatic operational modal analysis using statistical modelling of pole locations. *Proceedings of the International Conference on Noise and Vibration Engineering*, 2018.

- [55] E. Orlowitz and A. Brandt. Influence of noise in correlation function estimates for operational modal analysis. In *Proc. of the 36th International Modal Analysis Conference (IMAC), Orlando, FL, Feb. 12 – 15, 2018*.
- [56] Anders Brandt, Marta Berardengo, Stefano Manzoni, Marcello Vanali, and Alfredo Cigada. Summarizing results for scaling oma mode shapes by the omah technique. In *Rotating Machinery, Vibro-Acoustics & Laser Vibrometry, Volume 7*, pages 1–8. Springer, 2018.
- [57] M. S. Andersen and A. Brandt. Recent advances and challenges for the non-flutter design principle. In *Proc. of 9th Asia-Pacific Conference on Wind Engineering, Auckland, New Zealand, 2017*.
- [58] Anders Brandt, Marta Berardengo, Stefano Manzoni, Marcello Vanali, and Alfredo Cigada. Global scaling of oma modes shapes with the omah method. In *Proceedings of International Conference on Structural Engineering Dynamics (ICEDyn), Ericeira, Portugal, 2017*.
- [59] Anders Brandt. Advantages of using long dft computation for signal processing in operational modal analysis. In *Proceedings of International Conference on Structural Engineering Dynamics (ICEDyn), Ericeira, Portugal, 2017*.
- [60] A. Brandt, M. Berardengo, S. Manzoni, and A. Cigada. Using three-parameter sine fitting for scaling mode shapes with omah. In *Proc. of the 7th International Operational Modal Analysis Conference (IOMAC), Ingolstadt, Germany, May 10 – 12, 2017*.
- [61] A. Brandt, M. Berardengo, S. Manzoni, and A. Cigada. Harmonic scaling of mode shapes for operational modal analysis. In *Proceedings of the International Conference on Noise and Vibration Engineering (ISMA 2016), 2016*.
- [62] M. Andersen and A Brandt. An alternative to the flutter derivatives. In *Proc. 8th International Colloquium on Bluff Body Aerodynamics and Applications, Northeastern University, Boston, MA., 7–11 May 2016, 2016*.
- [63] Anders Brandt and Christopher Kjær. Flipping the classroom for a class on experimental vibration analysis. In *Rotating Machinery, Hybrid Test Methods, Vibro-Acoustics & Laser Vibrometry, Volume 8*, pages 155–159. Springer, 2016.
- [64] A. Ong Zhi Chao, Mohd. Adeen Mohd., Arif Kor, and A. Brandt. Experimental validation of phase synchronisation effects in optimising impact-synchronous time averaging. In *Proc. 5th International Operational Modal Analysis Conference (IOMAC), Gijón, Spain, 2015*.
- [65] E. Orlowitz and A Brandt. Operational modal analysis of a ro-lo vessel under different speed conditions. In *Proc. 7th International Conference on Hydroelasticity in Marine Technology, Split, Croatia, 2015*.
- [66] A. Brandt. Comparison and assessment of methods to treat harmonics in operational modal analysis. In *Proc. of the International Conference on Structural Engineering Dynamics (ICEDyn), Lagos, Portugal, 2015*.
- [67] E. Orlowitz and A. Brandt. Damping estimation from operational and experimental modal analysis on a laboratory test plate. In *Proc. 5th International Operational Modal Analysis Conference (IOMAC), Gijón, Spain, 2015*.
- [68] E. Orlowitz, P. Andersen, and A. Brandt. Comparison of simultaneous and multi-setup measurement strategies in operational modal analysis. In *Proc. 5th International Operational Modal Analysis Conference (IOMAC), Gijón, Spain, 2015*.
- [69] E. Orlowitz and A. Brandt. Producing simulated time data for operational modal analysis. In *Proc. 33rd International Modal Analysis Conference (IMAC), Orlando, FL, 2015*.

- [70] Andreas Linderholt, Yousheng Chen, Esben Orlowitz, and Anders Brandt. A study of the coupling between test data accuracy and life prediction. In *Proceedings of the International Conference on Noise and Vibration Engineering (ISMA 2014)*, 2014.
- [71] E. Orlowitz and A. Brandt. Effects of simultaneous versus roving sensors measurement in operational modal analysis. In *Proceedings of the International Conference on Noise and Vibration Engineering (ISMA 2014)*, 2014.
- [72] E. Orlowitz and A. Brandt. Modal test results of a ship under operational conditions. In *Proc. 32nd International Modal Analysis Conference (IMAC), Orlando, FL*, 2014.
- [73] A. Brandt. Lab exercises for a course on mechanical vibrations. In *Proc. 32nd International Modal Analysis Conference (IMAC), Orlando, FL*, 2014.
- [74] A. Brandt. Some cornerstones of signal analysis history. In *Proc. 32nd International Modal Analysis Conference (IMAC), Orlando, FL*, 2014.
- [75] A. Brandt. Some aspects of time domain parameter extraction approaches for operational modal analysis. In *Proc. of the International Conference on Structural Engineering Dynamics (ICEDyn), Sesimbra, Portugal, 17-19 June*, 2013.
- [76] E. Orlowitz and A. Brandt. Influence of correlation estimation methods on damping estimates. In *Proc. 5th International Operational Modal Analysis Conference (IOMAC), Guimarães, Portugal, May 13 – 15*, 2013.
- [77] P.-O. Sturesson, A. Brandt, and M. Ristinmaa. Structural dynamics teaching example - a linear test analysis case using open software. In *Proc. 31st International Modal Analysis Conference (IMAC), Garden Grove, CA*, 2013.
- [78] A. Brandt. The ABRAVIBE toolbox for teaching vibration analysis and structural dynamics. In *Proc. 31st International Modal Analysis Conference (IMAC), Garden Grove, CA*, 2013.
- [79] A. Brandt and A. Linderholt. A periodogram-based method for removing harmonics in operational modal analysis. In *Proceedings of the International Conference on Noise and Vibration Engineering (ISMA 2012)*, 2012.
- [80] K. Jarnerö, Å. Bolmsvik, A. Brandt, and A. Olsson. Effect of flexible supports on vibration performance of timber floors. In *Proc. 9th European Conference on Noise Control, Prague, Czech Republic*, 2012.
- [81] A. Brandt and C. Vaarning. A comparison of non-parametric techniques for FRF estimation using pure random excitation. In *Proc. 30th International Modal Analysis Conference, Jacksonville, FL*, pages 545 – 557, Jan. 2012.
- [82] Min Hu, Marie Johansson, Anders Olsson, Charlotte Bengtsson, and Anders Brandt. Grading of sawn timber using the vibration technique : Locating imperfections based on flexural mode shapes. In *17th International Nondestructive Testing and Evaluation of Wood Symposium, Sopron, Hungary*, 2011.
- [83] R. Brincker and A. Brandt. Time synchronization by modal correlation. In *Proc. 4th International Operational Modal Analysis Conference, IOMAC*, 2011.
- [84] A. Brandt. Unbiased estimation of frequency response in the presence of input and output noise. In *29th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2011.
- [85] R. Brincker, A. Brandt, C. Georgakis, J. H. Roldsgaard, and D. Schiltz. Estimation of damping for one of the new european court towers in luxembourg. In *29th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2011.
- [86] R. Brincker and A. Brandt. Estimating low-bias frequency response using random decrement. In *29th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2011.

- [87] A. Brandt and R. Brincker. Impact excitation processing for improved frequency response quality. In *28th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2010.
- [88] R. Brincker and A. Brandt. Random decrement signal processing of modal impact test data. In *28th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2010.
- [89] R. Brincker and A. Brandt. FFT integration of time series using an overlap-add technique. In *Proc. 28th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2010.
- [90] R. Brincker, A. Brandt, and R. Bolton. Calibration and processing of geophone signals for structural vibration measurements. In *28th International Modal Analysis Conference, Jacksonville, FL*. Society for Experimental Mechanics, Feb 2010.
- [91] K. Jarnerö, A. Brandt, and A. Olsson. In situ testing of timber floor vibration properties. In *Proc. 11th World Conference on Timber Engineering, Trentino, Italy*, June 2010.
- [92] K. Jarnerö, A. Brandt, and A. Olsson. Vibration properties of a timber floor assessed in laboratory and during building construction. In *Proc. 39th International Congress and Exposition on Noise Control Engineering, INTER-NOISE, Lisbon, Portugal*, June 2010.
- [93] J. Granlund and A. Brandt. Bus drivers exposure to mechanical shocks due to speed bumps. In *26th International Modal Analysis Conference, Orlando, Florida*. Society for Experimental Mechanics, Feb 2008.
- [94] K. Ahlin, A. Brandt, and T. Lagö. Toolbox for simulation and parameter identification of nonlinear mechanical systems. In *25th International Modal Analysis Conference, Orlando, Florida*. Society for Experimental Mechanics, Feb 2007.
- [95] A. Brandt, B. Håkansson, and S. Stenfelt. Properties of bone conduction hearing. In *24th International Modal Analysis Conference, St. Louis, Missouri*. Society for Experimental Mechanics, Feb 2006.
- [96] A. Brandt, R. Brincker, and K. Ahlin. Welsh averaging method revisited. In *2nd International Operational Modal Analysis Conference, Copenhagen, Denmark*, May 2006.
- [97] H. Åkesson, A. Brandt, T. Lagö, and I. Claesson. Operational modal analysis of a boring bar during cutting. In *1st International Conference on Operational Modal Analysis, Copenhagen, Denmark*. Society for Experimental Mechanics, Feb 2005.
- [98] A. Brandt, T. Lagö, K. Ahlin, and J. Tuma. Main principles and limitations of current order tracking methods. In *23rd International Modal Analysis Conference, Orlando, Florida*. Society for Experimental Mechanics, Feb 2005.
- [99] A. Brandt, T. Lagö, and K. Ahlin. Matlab toolboxes for advanced noise and vibration analysis. In *1st International Operational Modal Analysis Conference, Copenhagen, Denmark*, May 2005.
- [100] A. Brandt and T. Lagö. Actual accuracy in flight data collection and analysis. In *Trans. SAE 2005*, 2005.
- [101] A. Brandt, L. Håkansson, and I. Claesson. Cyclostationary analysis of boring bar vibrations. In *22nd International Modal Analysis Conference, Dearborn, Michigan*. Society for Experimental Mechanics, Feb 2004.
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LAST UPDATED

July 19, 2022