

Veröffentlichungen 2004/2005

S. ADHIKARI, N. WAGNER: *Direct Time-Domain Integration Method for Exponentially Damped Linear Systems.* Computers and Structures, Vol. 82, 2004, S. 2453-2461

B. M. BEADLE, S. HURLEBAUS, L. J. JACOBS, L. GAUL : *Detection and Localization of Small Notches in Plates Using Lamb Waves.* IMAC XXIII: A Conference and Exposition on Structural Dynamics. Society for Experimental Engineers, 2005, CDROM, paper No. 96

B. M. BEADLE, S. HURLEBAUS, U. STÖBENER, L. GAUL : *Active Control Strategies for Vibration Isolation.* IUTAM Symposium on the Vibration Control of Nonlinear Mechanisms and Structures, München, 2005

B. M. BEADLE, S. HURLEBAUS, U. STÖBENER, L. GAUL : *Modelling and Control Techniques of an Anti-Vibration System.* SPIE Conference on Smart Structures, San Diego , California , 2005

B. M. BEADLE, S. HURLEBAUS: *Finite Element Investigation of Lamb Wave Interaction with Cracks in Plates.* 5th International Workshop in Structural Health Monitoring. Editor: Fu-Kuo Chang, Destech Publishing Inc., 2005, S. 1761-1768

F. BLUM, L. GAUL : *Experimental and Numerical Acoustic Modal Analysis of Hydroacoustic Testbasin.* Deutsche Jahrestagung für Akustik DAGA, München, 2005

S. FALK, N. WAGNER: *Ein neuer Eigenlös für Polynommatrizen.* Proceedings in Applied Mathematics and Mechanics (PAMM), Vol. 4, 2004, S. 668-669

O. FEIN, L. GAUL , U. STÖBENER: *Vibration Reduction of a Fluid-Loaded Plate by Modal Control.* Journal of Intelligent Material Systems and Structures, Vol. 16, No. 6, SAGE-Publications, 2005, S. 541-552

M. FISCHER, L. GAUL : *Fast BEM-FEM Mortar Coupling for Acoustic-Structure Interaction.* International Journal for Numerical Methods in Engineering, Vol. 62, Issue 12, John Wiley & Sons Ltd., 2005, S. 1677-1690

M. FISCHER, L. GAUL : *Application of the Fast Multipole BEM for Structural-Acoustic Simulations.* Journal of Computational Acoustics (IMACS), Vol. 13, No. 1, 2005, S. 87-98

U. GAUGER, S. TURRIN, M. HANSS, L. GAUL : *On a Generalized Buckling Problem with Fuzzy-Valued Material and Support Parameters.* Proceedings of

20th Canadian Congress of Applied Mechanics (CANCAM 2005), Montreal , Canada , 2005, S. 594-495

U. GAUGER, M. HANSS, L. GAUL : *Fuzzy Arithmetical Finite Element Modelling of Automotive Components with Uncertain Parameters*. Proceedings of US National Congress on Computational Mechanics, Austin , Texas , USA , 2005

U. GAUGER, M. HANSS, L. GAUL : *Fuzzy Arithmetic for the Finite Element Modeling of Structures in the Presence of Uncertainty*. Proceedings of ASIM2005 18. Symposium Simulationstechnik, Friedrich-Alexander Universität, Erlangen-Nürnberg, 2005

L. GAUL , M. KÖGL, F. MOSER, M. SCHANZ: *Boundary Element Methods for the Dynamic Analysis of Elastic, Viscoelastic, and Piezoelectric Solids*. Encyclopedia of Computational Mechanics, Volume 2 Solids and Structures. Editors: Erwin Stein, René de Borst, Thomas J. R. Hughes, John Wiley & Sons, Chichester , 2004, S. 751-769

L. GAUL , M. FISCHER, U. GAUGER: *Accuracy and Efficiency of the Multipole Galerkin BEM for Acoustics*. Proceedings of the 6th International Conference on Theoretical and Computational Acoustics, ICTCA, Honolulu . World Scientific Co. Pte. , Singapore , 2004, S. 97-106

L. GAUL , M. MAYER: *Modelling of Structural Joints – An Overview*. IMAC XXIII: A Conference and Exposition on Structural Dynamics. Society for Experimental Engineers, 2005, CDROM

L. GAUL , H. ALBRECHT: *Semi-Active Damping by Structural Joints*. IMAC XXIII: A Conference and Exposition on Structural Dynamics. Society for Experimental Engineers, 2005, CDROM, paper No. 69

L. GAUL: *3D Simulation der Hydroakustik flexibler Leitungssysteme*. Kurzfassung der Vorträge zum 4. Workshop des SFB 412: Modellierung, Simulation, und Führung verfahrenstechnischer und biologischer Systeme, Universität Stuttgart, 2005, S. 23/24

L. GAUL: *Simulation des dynamischen Verhaltens von Rohrleitungssystemen der Verfahrenstechnik*. Sonderforschungsbereich 412: Rechnergestützte Modellierung und Simulation zur Analyse, Synthese und Führung verfahrenstechnischer Prozesse, Ergebnisbericht 2002-2003-2004, Universität Stuttgart, 2005, S. 179-201

L. GAUL, R. ALLGAIER, K. WILLNER, W. KEIPER: *Untersuchungen zum Bremsenquietschen am Balken-Scheibe-Modell*. Konstruktion – Zeitschrift für Produktentwicklung, Springer-VDI-Verlag, Heft 6 (Juni), 2005, S. 1-3

L. GAUL , M. FISCHER: *Simulation of Acoustic Fluid-Strucutre Interaction with Advanced Boundary Element Method*. Advances in Boundary Element

Techniques VI. Editors: A. P. S. Selvadurai, C. L. Tan, M. H. Aliabadi, EC Ltd. Eastleigh , UK , 2005, S. 187-192

L. GAUL , S. HURLEBAUS, H. ALBRECHT, J. WIRNITZER: *Controlled Friction Damping using Optimally Located Structural Joints*. LNCIS 322 (Lecture Notes in Control and Information Sciences): Control and Observer Design for Nonlinear Finite and Infinite Dimensional Systems. Editors: Th. Meurer, K. Graichen, E. D. Gilles, Springer-Verlag, Berlin, 2005, S. 335-350

D. GÖGE, M. FÜLLEKRUG, M. SINAPIUS, L. GAUL : *Advanced Test Strategy for Identification and Characterization of Nonlinearities of Aerospace Structures*. AIAA Journal, Vol. 43, No. 5, 2005, S. 974-986

M. HANSS, U. GAUGER, L. GAUL : *Modelling and Simulations of Vibrating Automotive Components with Uncertain Parameters Using Fuzzy Arithmetic*. IMAC XXIII: A Conference and Exposition on Structural Dynamics. Society for Experimental Engineers, 2005, CDROM, paper No. 43

M. HANSS: *Applied Fuzzy Arithmetic – An Introduction to Engineering Applications*. Springer-Verlag , Berlin , 2005

M. HANSS, K. WILLNER: *On the Use of Fuzzy Arithmetic for Automotive Crash Simulations in the Presence of Uncertainty*. Proceedings of 20th Canadian Congress of Applied Mechanics (CANCAM 2005), Montreal , Canada , 2005, S. 590-591

N. HOFFMANN, N. WAGNER, L. GAUL : *Quenching Mode-Coupling Friction-Induced Instability Using High-Frequency Dither*. Journal of Sound and Vibration, Vol. 279, Elsevier, 2005, S. 471-480

S. HURLEBAUS, L. GAUL : *Calculating the Eigenfrequency of Rotating Acoustic Annulus inside Labyrinth Seals of Turbo Machines*. Journal of Engineering for Gas Turbines and Power, ASME, Vol. 127, No. 1, 2005, S. 178-181

S. HURLEBAUS, U. STÖBENER, L. GAUL : *Vibration Reduction by Active Modal Control*. Proceedings of the ECCOMAS Thematic Conference on Smart Material and Structures, Lissabon, 2005

M. JUNGE, M. FISCHER, M. MAESS, L. GAUL : *Acoustic Simulation of an Idealized Exhaust System by Coupled FEM and Fast Multipole BEM*. Twelfth International Congress on Sound and Vibration (ICSV12), Lissabon, 2005, CDROM

T. KREUZINGER, S. HURLEBAUS, J. E. MICHAELS, L. J. JACOBS: *Development of a Method to Extract Dispersion Curves Out of Distorted PZT Measurements*. Review of Progress in Quantitative Nondestructive Evaluation, 2005

M. MAESS, L. GAUL : *Simulation of Structural Deformations of Flexible Piping Systems by Acoustic Excitation Using Modal Controllabilities*. ASME Pressure Vessels and Piping Division Conference, Denver , 2005, CDROM

M. MAESS, L. GAUL : *Dispersion in Fluid-Filled Pipes by Analyzing Finite Element Models*. Deutsche Jahrestagung für Akustik DAGA, München, 2005, CDROM

M. MAESS, L. GAUL: *Simulation of Vibro-Acoustics in Flexible Piping Systems*. GAMM Mitteilungen 28, No. 1, Wiley-VCH, 2005, S. 37-55

M. MAYER, L. GAUL : *Modeling of Contact Interfaces Using Segment-to-Segment-Elements for FE Vibration Analysis*. IMAC XXIII: A Conference and Exposition on Structural Dynamics. Society for Experimental Engineers, 2005, CDROM, paper No. 40

M. MAYER, L. GAUL : *Zero Thickness Elements: An Efficient Approach to Model the Contact Area of Jointed Structures*. Twelfth International Congress on Sound and Vibration (ICSV12), Lissabon, 2005, CDROM