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	Nota di contenuto	Experimental Validation of the Dual Kalman Filter for Online and Real-time State and Input Estimation -- Comparison of Uncertainty in Passive and Active Vibration Isolation -- Observation DOF's Optimization for Structural Forces Identification -- Nonlinear Structural Finite Element Model Updating using Batch Bayesian Estimation -- A Comparative Assessment of Nonlinear State Estimation Methods for

Structural Health Monitoring -- Hierarchical Bayesian Model Updating for Probabilistic Damage Identification -- Nonlinear Structural Finite Element Model Updating Using Stochastic Filtering -- Dispersion-corrected, Operationally Normalized Stabilization Diagrams for Robust Structural Identification -- Online Damage Detection in Plates via Vibration Measurements -- Advanced Modal Analysis of Geometry Consistent Experimental Space-Time Databases in Nonlinear Structural Dynamics -- Comparison of Damage Classification Between Recursive Bayesian Model Selection and Support Vector Machine -- A Comparative Study of Mode Decomposition Techniques to Relate Dynamic Modes Identified Using Parametric and Non-Parametric Methods -- Comparison of Different Approaches for the Model-based Design of Experiments -- Sensitivity Analysis for Test Resource Allocation -- Predictive Validation of Dispersion Models Using a Data Partitioning Methodology -- Experimental Variability on Modal Characteristics of an In-situ Pump -- SICODYN Research Project: Variability and Uncertainty in Structural Dynamics -- Variability of a Bolted Assembly Through an Experimental Modal Analysis -- Bottom-up Calibration of an Industrial Pump Model: Toward a Robust Calibration Paradigm -- Model Validation in Scientific Computing: Considering Robustness to Non-Probabilistic Uncertainty in the Input Parameters -- Robust-optimal Design Using Multifidelity Models -- Robust Modal Test Design Under Epistemic Model Uncertainties -- Clustered Parameters of Calibrated Models when Considering Both Fidelity and Robustness -- Uncertainty Propagation Combining Robust Condensation and Generalized Polynomial Chaos Expansion -- Robust Updating of Operational Boundary Conditions of a Grinding Machine -- Impact of Numerical Model Verification and Validation within FAA Certification -- The Role of Model V&V in the Defining of Specifications -- A Perspective on the Integration of Verification and Validation Into the Decision Making Process -- A MCMC Method for Bayesian System Identification From Large Data Sets -- A MCMC Method for Bayesian System Identification From Large Data Sets -- Reducing MCMC Computational Cost With a Two Layered Bayesian Approach -- Comparison of FRF Correlation Techniques -- Improved Estimation of Frequency Response Covariance -- Cross Orthogonality Check for Structures With Closely Spaced Modes -- Modeling of an Instrumented Building Subjected to Different Ground Motions -- Calibration and Cross-Validation of a Car Component Model Using Repeated Testing -- Structural Dynamics Model Calibration and Validation of a Rectangular Steel Plate Structure -- Human Activity Recognition Using Multinomial Logistic Regression. .

| Sommario/riassunto | Model Validation and Uncertainty Quantification, Volume 3. Proceedings of the 33rd IMAC, A Conference and Exposition on Balancing Simulation and Testing, 2015, the third volume of ten from the Conference brings together contributions to this important area of research and engineering. The collection presents early findings and case studies on fundamental and applied aspects of Structural Dynamics, including papers on: Uncertainty Quantification & Model Validation Uncertainty Propagation in Structural Dynamics Bayesian & Markov Chain Monte Carlo Methods Practical Applications of MVUQ Advances in MVUQ & Model Updating. |