

Day 4: Thursday, 27 November

Room 1 (201-311)

A-2: Health Monitoring, Diagnosis 2

Chair: Lihua Tang (The University of Auckland)

9:00	117	Tawhidul Islam Khan, Md Mehedi Hasan and Arif Abdullah Rashid	Accurate Acquisition of Time of Arrival of AE Signals for Location in Structural Health Monitoring Technique
9:20	121	Kenji Terabayashi, Masaki Shiina and Tohru Sasaki	AI-powered anomaly detection of vibration data in weir roller gate for condition monitoring
9:40	122	Tianyi Tang, Kensuke Suzuki, Takuma Mastukura, Hajime Saito, Xingzhi Li, Yushin Hara and Kanjuro Makihara	Structural Parameter Estimation via Subspace Identification with a Limited Number of Sensors

A-2: Health Monitoring, Diagnosis 3

Chair: Sinniah Ilanko (University of Waikato)

10:40	125	Ming Fang, Keiichi Katayama, Akira Heya, Shigeyuki Tomimatsu and Tsuyoshi Inoue	Model-based evaluation of feature quantities variation in worn water-lubricated journal bearings with experimental validation
11:00	149	Seyedhesam Hosseinizadeh Mazloui, Madhurjya Dev Choudhury, Yuqian Lu and Jaspreet Singh Dhupia	Low-Cost Platform Architecture for Edge and Cloud-based Real-Time Vibration Condition Monitoring
11:20	109	Peng Guo and Dongsheng Li	Damping Identification Using VMD-SSP under Ambient Vibration Conditions
11:40	163	Abdelgadir Abdelghani, Lim Hee and Mahmood Hammad	Prescriptive Maintenance of Rotating Machinery Using AI-Enhanced Vibration Reliability Modelling in Variable Operating Conditions

Room 2 (201-326)

A-9: Noise and Vibration Control 3

Chair: Masaki Kameyama (Shinshu University)

9:00	106	Xingyu Zhou, Akira Heya and Tsuyoshi Inoue	Dynamic Analysis of a Multi-Rotor System with a Centrifugal Double Pendulum Vibration Absorber
9:20	108	Yushin Hara, Tianyi Tang and Kanjuro Makihara	Vibration Excitation for Structural Identification using Piezoelectric Energy-Regeneration
9:40	127	Takeroh Yasuoka and Hiroyuki Iwamoto	Reduction of bias in active mass damper used for a wave control system based on frequency-shaped linear quadratic regulator

A-9: Noise and Vibration Control 4

Chair: Yushin Hara (Tohoku University)

10:40	128	Masaki Kameyama and Ryotaro Minagawa	Single-modal Vibration Control of Laminated Plates based on the Optimal Placement of a Pair of Piezoelectric Sensor/actuator
11:00	145	Changzhi Hu, Mingji Chen and Lihua Tang	Accelerated inverse design of NURBS shell-based metamaterial with quasi-zero stiffness
11:20	147	Fang Hong, Kai Zhang and Lihua Tang	Voltage-Controlled Robust Topological States in Perforated Beams
11:40	40	Hiroki Aizawa, Atsumu Nagata, Miwa Sueda, Takuo Nagamine, Ken Nakano and Chiharu Tadokoro	Suppression of friction-induced vibration in mechanical seals using parallel misalignment

Room 3 (201-334)

A-3: Nonlinear dynamics 1

Chair: Stefanie Gutschmidt (University of Canterbury)

9:00	9	Baiyang Shi	Nonlinear analysis of frictional jointed beams with inerter-based dynamic vibration absorber
9:20	19	Masahiro Oki and Hiroshi Yabuno	Bifurcation analysis of impact oscillation in railway wheelsets due to flange contact
9:40	27	Mai Zhang, Junri Nakagawa, Walter Lacarbonara and Hiroshi Yabuno	Simultaneous multiple mass-sensing resonators based on self-excitation in viscous environments
10:00	88	Tao Han, Fei Ye, Michael McFarland and Huancai Lu	Nonparametric Stability Augmentation of a Nonlinear Pendulum with Nonperiodic Potential

A-3: Nonlinear dynamics 2

Chair: Brian Mace (The University of Auckland)

10:40	148	Xiaoxin Dai, Lihua Tang and Xiaojun Wei	Dynamics of a polynomial stiffness nonlinear vibration absorber subjected to harmonic excitation
11:00	79	Miwa Sueda, Yota Watanabe, Chiharu Tadokoro and Takuo Nagamine	Energetic consideration of the effect of dynamic vibration absorber on synchronization between two unbalanced rotors
11:20	154	Ryan O'Sullivan, Stefanie Gutschmidt and Seigan Haysashi	Low-cost hardware and software package for control-based continuation
11:40	73	Seigan Hayashi and Stefanie Gutschmidt	Experimental Characterisation of Actively Operated MEMS

12:10-
12:30

Room 201-393 Closing Session

14:30

Lab Tour