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WORKSHOP PROGRAM

Tuesday, July 1

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- 382 Preliminary Assessment of a Low-Sampling-Rate Wearable Head-Mounted Inertial Sensor System for Human Activity Recognition**
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- 388 3D Printed Wearable Sensor for the Evaluation of Joint Movement Planes**
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- 394 A New Method for Accurate Shoulder Strength Measurements**
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- 400 Impact of Marker-Set and Joint Constraint on Kinematic Outcome in Patients with Knee Osteoarthritis**
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Session 8.2 - Innovation in Sensor and Measurement Systems - PART III

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- 405 **Spectra Signature Assessment in Relation to CDWs Quality Using Hyperspectral Imaging in VIS-NIR Range**
Maria Teresa Calcagni (Università Politecnica Delle Marche, Italy); Giovanni Salerno (Università Politecnica delle MRCHE, Italy); Gloria Cosoli (Università eCampus, Italy); Alessandra Mobili and Jacopo Donnini (Università Politecnica Delle Marche, Italy); Gian Marco Revel (Università Politecnica delle Marche, Italy)
- 411 **Absorption-Based Laser Mass Flow Meter Design for Iodine Based Applications**
Lorenzo Parri, Marco Mugnaini and Enza Panzardi (University of Siena, Italy); Carla Guidi, Manuel M Saravia and Alessio Ceccarini (University of Pisa, Italy); Elia Landi (University of Siena, Italy); Nils Gerrit Kottke (Airbus, Germany)
- 416 **Preliminary Development of a Small-Scale Prototype for a Novel Wave Energy Converter**
Gabriele Bocchetta, Giorgia Fiori and Marta Cecchitelli (Roma Tre University, Italy); Fabio Leccese ("Roma Tre" University, Italy); Nicola Pio Belfiore (Roma Tre University, Italy); Andrea Scorza (Roma TRE University, Italy); Salvatore Andrea Sciuto (University of ROMA TRE, Italy)
- 422 **Cyclic Intermittent Connectivity of Industrial Sensors Impacting Information Freshness**
Lucrezia Rossi (University of Padova, Italy); Leonardo Badia (Università degli Studi di Padova, Italy)
- 428 **Estimation of the Electric Capacity to Support Grid Ancillary Services Using Electric Vehicles**
Antonio Del Giudice (ENEA & ENEA, Italy); Daniele Buonocore and Vincenzo Paciello (University of Salerno, Italy)
- 433 **A Modular Ultrasonic System for Non-Destructive Testing in Nuclear Power Plants**
Bartas Abaravicius and Fan Yang (University of Edinburgh, United Kingdom (Great Britain)); Jean-François Saillant and Clara Borges (Framatome, France); Sandy Cochran (University of Glasgow, United Kingdom (Great Britain)); Srinjoy Mitra (University of Edinburgh, United Kingdom (Great Britain))

Session 8.3 - Control, Diagnosis and Supervision of the Measurement Systems

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- 438 **A Multi-Model Robust Control Design for Uncertain AMB Systems**
Giovanni Donati (University of Florence, Italy); Massimiliano Ortiz Neri (Baker Hughes, Italy); Michele Basso (University of Florence, Italy); Marco Mugnaini (University of Siena, Italy); Jerzy T. Sawicki (Cleveland State University, USA)
- 444 **A Statistical Method Combined with Load Profiling for the Predictive Diagnosis of Anomalies: a Preliminary Analysis**
Luca Tari, Federico Molinaro and Domenico Capriglione (University of Cassino and Southern Lazio, Italy); Luigi Ferrigno (University of Cassino, Italy)
- 450 **A Novel Method for Transformer Diagnosis Based on Load Profiling: a Preliminary Analysis**
Luca Tari, Antonio Nardone and Federico Molinaro (University of Cassino and Southern Lazio, Italy); Andrea Bernieri and Luigi Ferrigno (University of Cassino, Italy); Francesco Coratti (Tescmec Automation S.r.l, Italy)
- 456 **Improving the Robustness of Data-Driven Pipelines via the Adaptive Neuro-Fuzzy Inference System: an Industrial Use Case**
Aaqib Lone and Armir Bujari (University of Bologna, Italy)
- 462 **A Novel Benchmark for Fault Detection in Rolling Bearings Using CNNs and Monte Carlo Dropout**
Luca Martiri, Parisa Esmaili and Loredana Cristaldi (Politecnico di Milano, Italy)
- 467 **Leaked Age of Information of Preemptive Status Updates Against a Preemptive Eavesdropper**
Pietro Meneghini (University of Padova, Italy); Leonardo Badia (Università degli Studi di Padova, Italy)