June 12-13 - Politecnico di Torino

Parallel Session - Hybridization & Electrification

- Numerical Assessment of Fuel Consumption and Tailpipe Emissions for Electrified Long Haul Heavy-Duty Commercial Vehicles, **A. Zanelli - *POWERTECH Engineering Srl***

- Optimization of the Power Split Ratio for a Fuel Cells-Battery Hybrid Electric Supercar, **M. Diana - *Università di Modena e Reggio Emilia***

- Hyva's Decarbonization Drive: Innovations in Component Electrification for Sustainable Heavy Machinery Solutions, **G.M. Fulgeri - *Hyva Group***

- How far can you drive on a full charge? A practical exploration of Battery Electric Vehicles range and environmental impact based on real-world data, **A. Tansini - *European Commission Joint Research***

- Potentials of non linear MPC strategy for the optimal control of a parallel P4 hybrid electric vehicle: towards improved fuel consumption and emissions over different driving missions, **L. Teodosio - *University of Naples Federico II***

- A methodology to develop and validate a 75-kWh battery pack model with its cooling system under a real driving cycle, **R. Sok - *Waseda University* (Paper #2024-37-0012)**

- Fuel Cell Fault Simulation and Detection for On Board Diagnostics using Real-Time Digital Twins Harshad, **R. Pandit - *Gamma Technologies LLC* (Paper #2024-37-0014)**

- The influence of design operating conditions on engine coolant pump absorption in real driving scenarios, **M. Di Bartolomeo - Università degli Studi dell'Aquila (Paper #2024 -37-0015)**

- Definition of a rule-based energy management controller for the simulation of a plug-in hybrid vehicle using power and on-board measured data, **S. Doulgeris - *Aristotle University of Thessaloniki* (Paper #2024-37-0016)**

- Choosing the Best Lithium Battery Technology in the Hybridization of Ultralight Aircraft, **T. Donateo - *University Of Salento* (Paper #2024-37-0017)**

- Potential of Serial Hybrid Powertrain Concepts towards decarbonizing the Off-Highway Machinery, **J. Weber - *DENSO AUTOMOTIVE Deutschland GmbH* (Paper #2024-37-0018)**

- Development of a Soft-Actor Critic Reinforcement Learning Algorithm for the Energy Management of a Hybrid Electric Vehicle, **L. Rolando - Politecnico di Torino (Paper #2024-37-0011)**

- Development of composite battery housing components: cost reduction and performance improvements for large volume BEVs**, L. Mazzarella - *Autoneum Management AG***