

OCTOBER 5TH, 2020

09:00-09:30	Opening Ceremony <i>Gino Bella, University of Rome Tor Vergata & Cesare Pianese, University of Salerno</i>	
Conventional Vehicles Chairman: Stefano Fontanesi, Università di Modena e Reggio Emilia		
09:30-10:15	Keynote Ezio Mancaruso, SAE Naples Section President, Istituto Motori CNR - Experimental Diagnostics to Develop Diesel Engines for a Sustainable Mobility	
10:15-10:35	Gilbert Sammut, <i>Jaguar Land Rover</i>	2020-24-0004 Simulation Study on the Use of Argon Mixtures in the Pressurized Motored Engine for Friction Determination
10:35-10:55	Gilbert Sammut, <i>Jaguar Land Rover</i>	2020-24-0009 A Simulation Study Assessing the Viability of Shifting the Location of Peak In-Cylinder Pressure in Motored Experiments
10:55-11:15	Francesco Duronio, <i>Università degli Studi dell'Aquila</i>	2020-24-0010 CFD Numerical Reconstruction of the Flash Boiling Gasoline Spray Morphology
11:15-11:35	Luca Petrucci, <i>Università degli Studi di Perugia</i>	2020-24-0005 Engine knock evaluation using a machine learning approach
11:35-12:00	Coffee Break	

Alternative Powertrains Chairman: Nicolò Cavina, Università di Bologna		
12:00-12:20	Giovanni Di Ilio, <i>University of Naples "Parthenope"</i>	2020-24-0011 Performance Evaluation of Extended-Range Electric Vehicles equipped with Hydrogen-Fueled Rotary Engine
12:20-12:40	Emiliano Pipitone, <i>University of Palermo</i>	2020-24-0012 Steady state performance of spark ignition engines endowed of exhaust energy recovery
12:40-13:00	Alessandro D'Adamo, <i>Università di Modena e Reggio Emilia</i>	2020-24-0016 Numerical Simulation of a High Current Density PEM Fuel Cell
13:00-14:15	Lunch	
Alternative Powertrains Chairman: Alessandro d'Adamo, Università di Modena e Reggio Emilia		
14:15-15:00	Keynote Mehrnaz Farzam Far, VTT, Roland Bittner, Semikron, Deepak Singh, NEVS <i>Integrated Modular Distributed Drivetrain for Electric/Hybrid Vehicles: Overview, Inverter, Vehicle</i>	
15:00-15:20	Silvana Di Iorio, <i>Istituto Motori CNR</i>	2020-24-0013 Turbulent jet ignition Effect on Exhaust Emission and Efficiency of a SI Small Engine Fuelled with Methane and Gasoline
15:20-15:40	Luigi Sequino, <i>Istituto Motori CNR</i>	2020-24-0014 Thermal Imaging of a Li-Ion Battery for the Estimation of the Thermal Parameters and Instantaneous Heat Dissipated
15:40-16:00	Simone Lombardi, <i>Niccolò Cusano University</i>	2020-24-0015 Retrofit of a Heavy-Duty Diesel Truck: Comparison of Parallel and Series Hybrid Architectures with Waste Heat Recovery

OCTOBER 6TH, 2020

Smart Mobility

Chairmen: Rafal Asorey Cacheda, *Universidad Politécnica de Cartagena* & Antonio Puliafito, *University of Messina*

10:00-10:45	Keynote	
	Antonio Puliafito, <i>University of Messina</i> - Software Defined Smart Cities: Integrating the Cyber World with the Internet of Things	
10:45-11:05	Davide Fassio, Giovanni Blandina, <i>EasyRain</i>	2020-24-0019 An Active Safety System Able to Counter Aquaplaning, Integrated with Sensorized Tires, ADAS and 5G Technology for Both Human-Driven and Autonomous Vehicles
11:05-11:25	Nadia Giuffrida, <i>University of Catania</i>	2020-24-0020 Combining GPS-Tracks and Accident Data to Improve Safety of Cycling Paths
11:25-11:45	Vincenza Torrisi, <i>University of Enna Kore ITALY</i>	2020-24-0021 The Evaluation of Car Sharing Service Attributes to Raise Acceptance of Electric Vehicles: Evidences from an Italian Survey Among University Students
11:45-12:05	Coffee Break	
Smart Mobility		
Chairmen: Rafal Asorey Cacheda, <i>Universidad Politécnica de Cartagena</i> & Antonio Puliafito, <i>University of Messina</i>		
12:05-12:25	Paolo Delle Site, <i>Niccolò Cusano University</i>	Oral Only Pricing of connected and autonomous vehicles in mixed traffic networks
12:25-12:45	Carlo Scaffidi, <i>Universita degli studi di Messina</i>	2020-24-0017 SCiNaS: A Smart City-driven Navigation System to Catch Green Waves
12:45-13:05	Daniele Beltrami, <i>University of Brescia</i>	2020-24-0018 Modelling of a 15-kW electric utility vehicle and range assessment through driving cycle analysis based on GPS experimental data
13:05-14:30	Lunch	

Transmissions & Driveline

Chairmen: Francesco Vivio, *University of Rome Tor Vergata* & Pierluigi Fanelli, *Università della Tuscia*

14:30-14:50	Alessandro Fauda, <i>BOSCH VHIT</i>	2020-24-0022 Innovative Electric Oil Pumps for Different Automotive Applications
14:50-15:10	Mattia Bonci, <i>Maserati S.p.a. Innovation Lab</i>	2020-24-0023 An Analytical Procedure to Analyse Efficiency, Cooling and Thermal Management of a BEV Sport Car Transmission
15:10-15:30	Eduard Beresch, Francesco Capittini, <i>Schaeffler Technologies AG & Co. KG</i>	2020-24-0024 Determination of Energy-Saving Potentials by Reducing The Rolling Bearing Friction In The Tractor Drive Train

OCTOBER 7TH, 2020

Conventional Vehicles Chairman: Daniele Chiappini, *Unicusano*

09:30-10:15

Keynote
Alberto Vassallo, *Punch Torino SpA* – Why Diesel? The Contribution Of Compression Ignition Engines To Sustainable Mobility

10:15-10:35

Loris Ventura, *Politecnico di Torino*

2020-24-0002 Intake O2 Concentration Estimation in a Turbocharged Diesel Engine through NOE

10:35-10:55

Guido F. Scocoza, *University of Bologna*

2020-24-0003 Experimental Investigation on the Effects of Cooled Low Pressure EGR and Water Injection on Combustion of a Turbocharged GDI Engine

10:55-11:15

Botond Csontos, *KTH Royal Institute of Technology*

2020-24-0006 Factors influencing the formation of soft particles in biodiesel

11:15-11:35

Arun Prasath K, *KTH Royal Institute of Technology*

2020-24-0007 On the effects of Turbocharger on Particle Number and Size Distribution in a Heavy - Duty Diesel Engine

11:35-11:55

Jacopo Mecagni, *University of Bologna*

2020-24-0008 Development and Experimental Validation of a Control-Oriented Empirical Exhaust Gas Temperature Model

11:55-12:15

Closing Ceremony
Gino Bella, *University of Rome Tor Vergata* & **Cesare Pianese, *University of Salerno***