

CONFERENCE SCHEDULE – DAY ONE

Tuesday, 31 March | All times listed in CEST

13:00 **OPENING** | Rainer Rothbauer | Convergent Science

13:10 **KEYNOTE** | **The Use of Coupled 1D-3D Simulation in the Optimization of High-Performance SI Engines**
Vincenzo Bevilacqua | Porsche Engineering Services GmbH

13:40 **Aerodynamic Characterization of an SI Engine Using LES and EMD2D**
Stéphane Jay | IFP Energies nouvelles

14:00 **LES Simulations in a Lean SI Optical Engine Using Thickened Flame Model**
Jacopo Zembi | University of Perugia

14:20 **Development of a RANS Methodology for Gaseous Emission Simulation in SI Engines**
Max Mally | RWTH Aachen University - Institute for Combustion Engines

14:40 **Modeling Transient Heat Transfer in a GDI Engine Using a 3D-CHT Approach**
Adèle Poubeau | IFP Energies nouvelles

15:00 **SPONSOR** | HPE

15:15 Break

15:35 **Online Trivia Game**

15:40 **Update on C3 Mechanism Development**
Henry Curran | NUI Galway

16:00 **On Turbulent Jet Ignition: A Numerical Comparison With Standard Spark Plug in Lean Conditions**
Egidio Cassone | Polytechnic University of Bari

16:20 **Modelling of Combustion and Knock Onset Risk in a High Performance TJI Engine**
Andrea Bianco | POWERTECH Engineering

16:40 **HPC and Machine Learning – Accelerating Engine Design Process**
Opeoluwa Owoyele | Argonne National Laboratory

17:00 **Real Surface Effects on Fuel Injection for Automotive and Aerospace Applications**
Lorenzo Nocivelli | Argonne National Laboratory

17:20 **Numerical Assessment of Latest Generation SCR Systems Performance**
Andrea Bianco | POWERTECH Engineering

17:40 **Technical Achievements in Gas Turbines and Aftertreatment**
Scott Drennan | Convergent Science

18:00 **CLOSING** | Kelly Senecal | Convergent Science

Flexible **Solutions** for the Engineering World

- Optimized compute platforms for CAE workloads
- Maximize efficiency of available licenses
- Remote graphics and batch scheduling enabled
- Simplified integration within existing infrastructures




Hewlett Packard
Enterprise

www.hpe.com/info/hpc-manufacturing-and-engineering

CONFERENCE SCHEDULE – DAY TWO

Wednesday, 01 April | All times listed in CEST

13:00 **Welcome** | Rainer Rothbauer | Convergent Science

13:10 **KEYNOTE | What is the Right Fuel?**

Heinz Pitsch | RWTH Aachen University - Institute for Combustion Technology

13:40 **Numerical Investigation on Fuel Spray Characteristics in Ducted Fuel Injection**

Andrea Piano | Politecnico di Torino

14:00 **LES Spray Studies for Improving RANS Diesel Combustion Simulations**

Vincenzo Pezza | General Motors Global Propulsion Systems

14:20 **Analysis of Combustion and Emissions in an LD CI Engine Through CFD Analysis**

Mirko Baratta | Politecnico di Torino

14:40 **Optimization of the Combustion Chamber Geometry for CI Engine Using MOGA**

Ramazan Şener | Marmara University

15:00 **Modeling Cooling of Electric Motors in CONVERGE** | David Rowinski | Convergent Science

15:20 **Break**

15:35 **Online Trivia Game**

15:40 **Battery Pack Simulation in CONVERGE 3.0**

Tristan Burton | Convergent Science

16:00 **Simulation and Optimization of the Flow Inside a Screw Compressor**

James Willie | CVS Engineering GmbH

16:20 **Investigating the Sealing of a New Concept Rotary Engine** | Savvas Savvakis, Elias Nassiopoulos, Dimitrios Mertzis, Zisis Samaras | Aristotle University of Thessaloniki

16:40 **Modeling of Combustion in Direct-Injected CNG Engines**

Abhishek Deshmukh | RWTH Aachen University - Institute for Combustion Technology

17:00 **An SGS Wrinkling Model for the TFM-AMR Approach in CONVERGE**

Cédric Mehl | IFP Energies nouvelles

17:20 **Prediction and Assessment of Engine Knock Events Using the Resonance Theory**

Corinna Netzer | Norwegian University of Science and Technology

17:40 **Soot Modelling Coupled with Flamelet-Based Spray Flame Simulations**

José-Manuel Pastor | CMT-Motores Térmicos

18:00 **CONVERGE 3.0 Results and Looking Ahead to 3.1** | Keith Richards | Convergent Science

18:20 **Closing** | Kelly Senecal | Convergent Science



Contacts

+39 011 3036481

info@pwt-eng.com

www.pwt-eng.com

**YOUR COMPETENT PARTNER FOR
POWERTRAIN SIMULATION AND
DEVELOPMENT**



POWERTECH Engineering is an independent consulting firm in the field of 3D-CFD, 1D and XiL simulation, applied to both conventional and electrified (HEV, BEV) powertrains. Born in 2007, after more than 1500 projects for 50+ customers, PWT has gained a recognized expertise in vehicle and powertrain simulation, with a continuously updated know-how and the best-in-class simulation tools. PWT carries out both off- and on-site projects. Starting from 2010, PWT is the *Technical Representative of GT-SUITE for Italy* and is a COVERGENT SCIENCE recommended consulting company.