



GT CONFERENCE 2018

The Largest Event in System Simulation

October 8-9, 2018



Frankfurt, Germany

Steigenberger Airport Hotel

30 Technical Presentations

Over 400 Participants

4 Parallel Sessions

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|--------------|--|--|--|--|
| 08:00 | REGISTRATION | | | |
| 08:50 | An Automated Approach to Derive Combustion- and NOx Models for GT-POWER Simulations, <i>J. Boyde, C.-O. Schmalzing, MTU</i> | | | |
| | Title TBD, X. YYY, OEM | | | |
| | Vehicle Electrification with GT-SUITE V2019 and GT-DRIVE+ Vehicle Modeling Framework, GT | | | |
| | Keynote: Role of Modeling and Simulation in xEV Battery Revolution, <i>C.-Y. Wang, EC- Power</i> | | | |
| 10:30 | REFRESHMENTS AND EXHIBITION | | | |
| 11:15 | ELECTRIFICATION | THERMAL MANAGEMENT | ENGINE MECHANICS/FRICTION | ACOUSTICS |
| | Optimization of a 48V Hybrid Architecture of a Passenger Car, <i>X. YYY, Politecnico di Torino, X. YYY, OEM</i> | Modular Approach to EV's Thermal Modeling, <i>M. Masera, HORIBA MIRA</i> | Methodology for Valvetrain Analysis in High Performance SI Engines, <i>M. Porhansl, Porsche Engineering Services</i> | Air Intake System Orifice Noise Prediction in Heavy Duty Vehicles, <i>H. Özcan, Ford Otosan</i> |
| | Integration of a Predictive Battery Model into a Virtual E-Vehicle, <i>X. YYY, GT</i> | Set-up and Validation of an Integrated Engine Thermal Model in GT-SUITE for Heat Rejection Prediction, <i>S. Pierson, G. Virelli, JLR, E. Servetto, E. Graziano, L. Bruno, P. Corrado, POWERTECH Engineering</i> | Optimization Studies of Engine Friction, <i>O. Kreckler, BMW</i> | Transmission Loss Analysis of a Truck Muffler and Exhaust System, <i>X. YYY, FAURECIA</i> |
| | Title TBD, <i>X. YYY, OEM</i> | Truck Cooling Package Optimization, <i>D. Charollais, Volvo Trucks</i> | Cylinder and Crankcase Oil Blowby Investigation using GT-SUITE, <i>A. Lefebvre, RENAULT</i> | Title TBD, <i>X. YYY, OEM</i> |
| 12:15 | LUNCH | | | |
| 13:30 | VEHICLE | EXHAUST AFTERTREATMENT | DETAILED COMPRESSOR | HVAC / CABIN COMFORT |
| | Tailpipe Emission Simulation of HEV's using GT-SUITE, <i>S. Yadla, FEV</i> | Conventional and Electrically Heated Diesel Oxidation Catalyst Modeling in GT-SUITE, <i>G. Cerrelli, GM Global Propulsion Systems</i> | Acoustic simulation of a swashplate compressor using GT-SUITE, <i>X. YYY, Sanden</i> | Benefits of a Vapor Injection Cycle for Automotive Applications, <i>B. Banney, AVL qpunkt</i> |
| | Engine Integration with 48V P2 Hybrid Vehicle for Fuel Economy, <i>S. Kogalur, Chalmers University, A. Aghaali, Volvo Cars</i> | Holistic Engine and EAT System Simulation from Concept to Series Development, <i>M. Weber, R. Rezaei, R. Möllmann, IAV</i> | Impact of sub 150 GWP Refrigerant on Commercial Refrigeration Systems Performances, <i>D. Leray, A. Chambon, Tecumseh</i> | Thermal Optimization of a Bus Cabin using GT-SUITE and TAITherm Co-Simulation, <i>X. YYY, VDL Bus</i> |
| | Title TBD, <i>X. YYY, OEM</i> | Simulation of Exhaust Aftertreatment Systems for Marine Diesel Engine Applications, <i>A. Fiedler, MAN Diesel & Turbo SE</i> | Reciprocating Compressor Modeling: A Comparison between 3D Fluid Structure Interaction and GT-SUITE Simulation Results, <i>E. H. Murakami, Nidec</i> | Cabin Modeling in GT-SUITE: From Multi-Zone to 3D Co-Simulation with TAITherm, <i>R. Delmont, C. Nief, PSA</i> |
| 14:30 | REFRESHMENTS AND EXHIBITION | | | |
| 15:15 | Multi-Objective Optimization of Fuel Injection Pattern for a Light Duty Diesel Engine through Numerical Simulation, <i>F. Sapio, A. Piano, F. Millo, Politecnico di Torino, F. Pesce, GM</i> | | | |
| | Virtual Air-path Calibration of a Multi-Cylinder Spark Ignition Engine using 1D Cycle Simulation, <i>L. Landry, Continental</i> | | | |
| | Design and Analysis with GT-SUITE V2019 Deployed Across the Enterprise, GT | | | |
| | Future Vision and Closing Remarks, <i>T. Morel, GT</i> | | | |
| 17:00 | ADJOURN – BEER BREAK | | | |
| 19:30 |  Black  Jack  Dinner  | | | |

TRAINING

!!! NEW !!! The training **Classes** will be held this year right at the Conference Hotel
Classes will begin at 8:30am

- **GT-POWER:** Engine Modeling
- **GT-SUITE:** Introduction Training

SEMINARS

1/2 Day Seminars - Free of Charge - Participate in 2 Seminars in 1 Day

NOTE: As usual, the seminars will be held at the Conference Hotel (Steigenberger Airport Hotel)

9:00 – 12:00

xEV Modeling with **GT-DRIVE+**
GT-POWER for Control & Engine Calibration
SI Combustion Advanced Topics
Optimization and HPC Second Generation of Capability in GT-SUITE v2018
Engine Mechanics v2019 New Features
Fuel Cell Modeling
Compressor Modeling

13:30 – 16:30

GT-AutoLion Multiphysics Battery Modeling
Accurate Emissions Modeling for RDE
Diesel Combustion Advanced Topics
Flow Generated NVH Intake, Exhaust, Compressor & Pumps
Exhaust Aftertreatment v2019 New Features
Introduction to **Aerospace** Applications
Thermal Management for Conventional and Electric Vehicles

