



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

08:00	REGISTRATION			
08:50	Crank-Angle Resolved Real-Time Engine Modeling for HiL based Virtual Calibration, <i>F. Xia, S.-Y. Lee, J. Andert, RWTH Aachen, A. Kampmeier, R. Tharmakulasingam, et al., FEV</i>			
	Single- and Multi-Objective Injection Strategy Optimizations by means of Genetic Algorithm, <i>A. Piano, F. Sapio, F. Millo, Politecnico di Torino, F. C. Pesce, GM</i>			
	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
	Comprehensive 48V diesel mild hybrid vehicle model for energy management control system calibration and validation, <i>A. Zanelli, F. Millo, Politecnico di Torino, R. Fuso, F. Di Gennaro, R. Romanato, GM</i>	Modular Approach to EV's Thermal Modeling, <i>M. Maserà, 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, GT	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. Krecker, BMW</i>	Transmission Loss Analysis of a Truck Muffler and Exhaust System, <i>S. Nezan, FAURECIA</i>
	Using the GT-SUITE toolchain for an electrical machine model supporting a XIL-cooling-circuit-testbench, <i>M. Lutz, M. Gsell, M. Auerbach, HS Esslingen</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>	Development of a Novel Transient-Pulsating Flow Rig for Engine Air System Research using GT-SUITE, <i>A. Costall, Imperial College London, R. Ivanov, R-Flow Ltd, R. Kruswyk, J. McDonald, Caterpillar Inc.</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</i>	Acoustic simulation of a swashplate compressor using GT-SUITE, <i>O. Derollepot, Sanden</i>	Efficiency of Single & 2-Stage Heat Pump Systems for Electric Vehicles, <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>	Condensing Unit and Blast Freezer Modeling with Low GWP Refrigerant, <i>D. Leray, A. Chambon, Tecumseh</i>	Thermal Optimization of a Bus Cabin using GT-SUITE and TAItherm Co-Simulation, <i>M. Beerens, VDL Bus</i>
	GT-SUITE to Support Powertrain Strategies – From Component Development to Fleet Fuel Consumption, <i>S. Klacar, CEVT</i>	Development and Validation of Multi Site Kinetic Model for SCR and ASC and application for SCR calibration, <i>C. Desai, K. Natti, B. Vernham, Isuzu</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 Mono-Zone to 3D Co-Simulation with TAItherm, <i>R. Delmont, C. Nief, PSA</i>
14:30	REFRESHMENTS AND EXHIBITION			
15:15	An Automated Approach to Derive Combustion- and NOx Models for GT-POWER Simulations, <i>J. Boyde, C.-O. Schmalzing, MTU</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 on Tuesday, 9 and 10 October

- **GT-SUITE:** Cranktrain 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 Optimization and HPC in GT-SUITE
Engine Mechanics v2019 New Features
Fuel Cell Modeling
Positive Displacement Pumps & Compressors

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

