GT CONFERENCE 2018

The Largest Event in System Simulation

October 8-9, 2018

Frankfurt, Germany

Steigenberger Airport Hotel

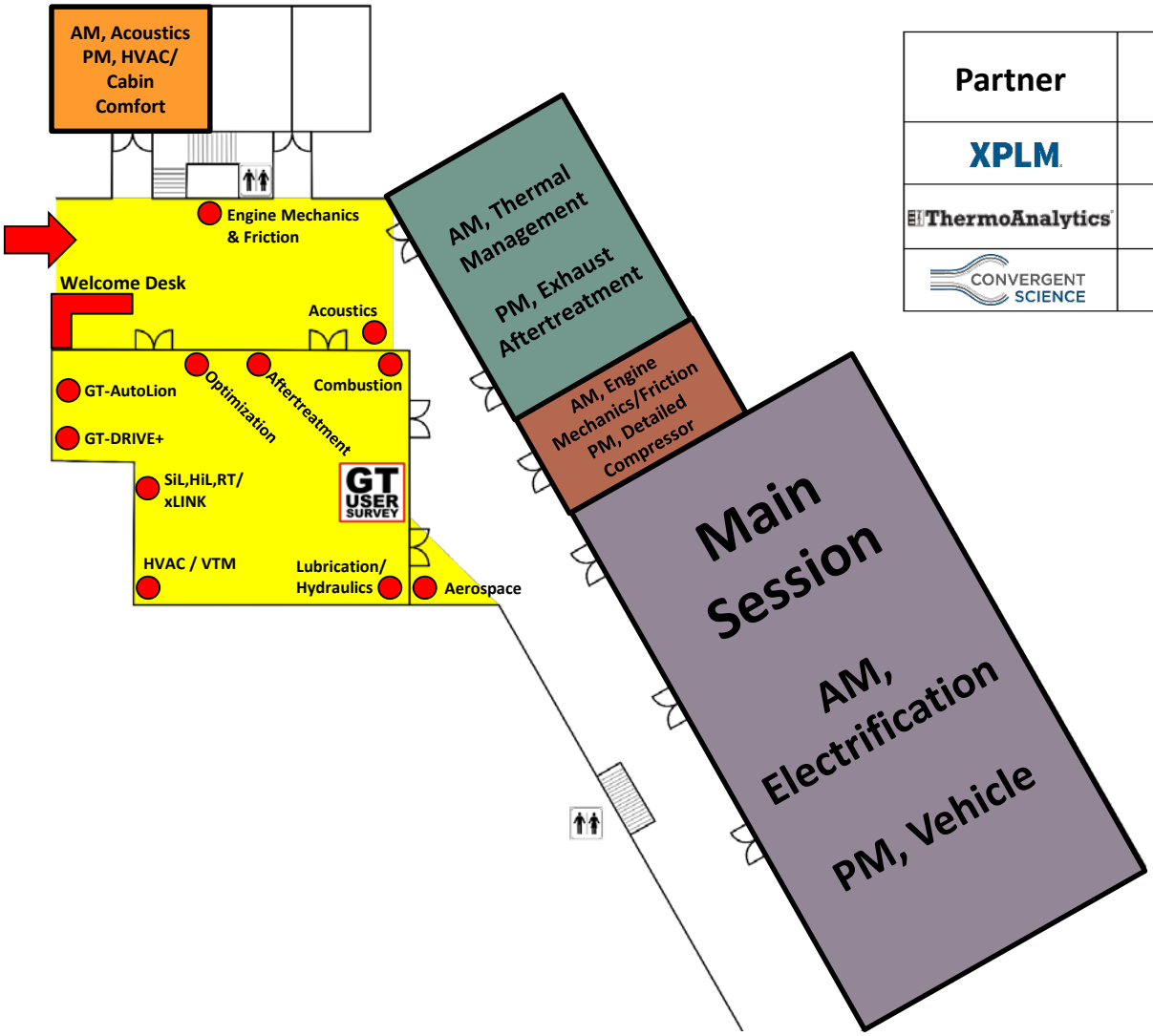
30 Technical Presentations

Over 400 Participants

4 Parallel Sessions

Monday, 8. October 2018

08:00	**REGISTRATION**			
08:40	Crank-Angle Resolved Real-Time Engine Modeling for HiL based Virtual Calibration, *F. Xia, S.-Y. Lee, J.Andert,* **RWTH Aachen**, *A. Kampmeier, R. Tharmakulasingam, et al.,* **FEV**			
	Single- and Multi-Objective Injection Strategy Optimizations by means of Genetic Algorithm, *A. Piano, F. Sapio, F. Millo*, **Politecnico di Torino**, *F. C. Pesce*, **GM**			
	Vehicle Electrification with GT-SUITE V2019 and GT-DRIVE+ Vehicle Modeling Framework, **GT**			
	Keynote: Role of Modeling and Simulation in xEV Battery Revolution, *C.-Y. Wang*, **EC- Power**			
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, *A. Zanelli, F. Millo*, **Politecnico di Torino**, *R. Fuso, F. Di Gennaro, R. Romanato*, **GM**	Modular Approach to EV's Thermal Modeling, *M. Masera*, **HORIBA MIRA**	Methodology for Valvetrain Analysis in High Performance SI Engines, *M. Porhansl,* **Porsche Engineering Services**	Methodology Development of Air Intake Orifice Noise Prediction, *H. Özcan,* **Ford Otosan**
	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, *S. Pierson, G. Virelli,* **JLR** *E. Servetto, E. Graziano, L. Bruno, P. Corrado,* **POWERTECH Engineering**	Optimization Studies of Engine Friction, *O. Krecker,* **BMW**	Transmission Loss Analysis of a Truck Muffler and Exhaust System**,** *S. Nezan,* **FAURECIA**
	Using the GT-SUITE toolchain for an electrical machine model supporting a XiL-cooling-circuit-testbench, *M. Lutz, M. Gsell, M. Auerbach,* **HS Esslingen**	Truck Cooling Package Optimization, *D. Charollais*, **Volvo Trucks**	Cylinder and Crankcase Blow-by Investigation using GT-SUITE, *A. Lefebvre,* **RENAULT**	Development of a Novel Transient-Pulsating Flow Rig for Engine Air System Research using GT-SUITE, *A. Costall,* **Imperial College London**, *R. Ivanov*, **R-Flow Ltd**, *R. Kruiswyk, J. McDonald*, **Caterpillar Inc.**
12:15	**LUNCH**			
13:30	**VEHICLE**	**EXHAUST AFTERTREATMENT**	**DETAILED COMPRESSOR**	**HVAC / CABIN COMFORT**
	Tailpipe Emission Simulation of HEV's using GT-SUITE, *S. Yadla*, **FEV**	Conventional and Electrically Heated Diesel Oxidation Catalyst Modeling in GT-SUITE**,** *G. Cerrelli,* **GM**	Swash-plate Compressor Model in GT-SUITE, *O. Derollepot*, **Sanden**	Efficiency of Single-Stage & 2-Stage Flash Tank Heat Pump Systems for Electric Vehicles, *B. Banney,* **AVL qpunkt**
	Engine Integration with 48V P2 Hybrid Vehicle for Fuel Economy, *S. Kogalur*, **Chalmers University**, *A. Aghaali*, **Volvo Cars**	Holistic Engine and EAT System Simulation from Concept to Series Development, *M. Weber, R. Rezaei, R. Möllmann,* **IAV**	Condensing Unit and Blast Freezer Modeling with Low GWP Refrigerant, *D. Leray,* **Tecumseh**	Thermal Optimization of a Bus Cabin using GT-SUITE and TAITherm Co-Simulation, *M. Beerens*, **VDL Bus**
	GT-SUITE to Support Powertrain Strategies – From Component Development to Fleet Fuel Consumption, *S. Klacar,* **CEVT**	Development and Validation of Multi Site Kinetic Model for SCR and ASC and application for SCR calibration, *C. Desai, K. Natti, B. Vernham,* **Isuzu**	Reciprocating Compressor Modeling: A Comparison between 3D-FSI and GT-SUITE 1D Simulation Results, *E. H. Murakami,* **Nidec**	Cabin Modeling in GT-SUITE: From Mono-Zone to 3D Co-Simulation with TAITherm, *R. Delmont,* **PSA**
14:30	**REFRESHMENTS AND EXHIBITION**			
15:15	An Automated Approach to Derive Combustion- and NOx Models for GT-POWER Simulations, *J. Boyde, C.-O. Schmalzing*, **MTU**			
	Virtual Air-Path Calibration of a Multi-Cylinder Spark Ignition Engine using 1D Cycle Simulation, *L. Landry*, **Continental**			
	Design and Analysis with GT-SUITE V2019 Deployed Across the Enterprise, **GT**			
	Future Vision and Closing Remarks, *T. Morel*, **GT**			
17:00	**ADJOURN – BEER BREAK**			
19:30	♥ Black ♣ Jack ♦ Dinner ♠			



Partner	GT Demo Booth
XPLM	xLINK
ThermoAnalytics	HVAC/VTM
CONVERGENT SCIENCE	Combustion

SEMINARS: Tuesday, 9. October

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**

13:00 – 16:00

- **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
- **Thermal Management** for Conventional and Electric Vehicles

TRAINING

Training classes will be held at the Conference Hotel (Steigenberger Airport Hotel) starting at 08:30

Tuesday, 9. October: GT-SUITE Introduction Training
Wednesday, 10. October: GT-SUITE Cranktrain Modeling