



# GT CONFERENCE 2014

## Special 20th Anniversary Edition

**VEHICLE & POWERTRAIN SYSTEM SIMULATION**

**OCTOBER 20-21. 2014**

**Steigenberger Airport Hotel Frankfurt, Germany**

With the participation of:

Audi, AVL MTC, Bosch Engineering, Combustion and Flow Solutions, Daimler, ETH-Zürich, FEV, FIAT, Ford, Ford Otosan, IAV, Jaguar Landrover, M-Plan, Mercedes-AMG, PSA, sa-charging Solutions, Valeo, Voith-Turbo, Volvo Cars, Volvo Trucks, Wartsilä, and others.

# Sunday, 19 October 2014

20:00	Traditional Get-Together at the Hotel – Special 20th Anniversary Come to meet GT staff and your friends, and enjoy the evening in the new Get-Together Room *
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(\* not at the Hotel Bar like in 2013)

# Monday, 20 October 2014

07:30	Registration	
08:30	Title TBD, Y. XXX, <b>FEV</b>	
	Engine Brake: Improved Methodology for Cam Design, P.-E. Grand, R. Riviere, <b>Volvo Trucks</b>	
	Keynote, R. Siegert & R. Weller, <b>Daimler</b>	
	Next Release GT-SUITE v7.5, <i>Managing Complexity</i> – Part 1	
10:15	REFRESHMENT AND EXHIBITION	
11:00	POWERTRAIN SESSIONS	VEHICLE SESSIONS
	Development of Common Rail Injection System using GT-Suite, J. Enlund, <b>Wartsilä</b>	Optimization of a Hybrid Powertrain using a Comprehensive Vehicle Model, T. Krenk, T. Lauer, <b>TU Wien</b>
	Fuel Line Roar Noise Analysis, X. Chen, H. Dines, C. Born, <b>Ford</b>	Vehicle Simulation over Different Physical Domains with GT-SUITE, C. Appel, <b>Bosch Engineering</b>
	Model based engine calibration of HD engines, B. Tilch, <b>IAV</b>	Simulation of the Clutch Hill Start Test, C. Erbaş, <b>Ford Otosan</b>
	Fully-Physical Model of a E6 Passenger Car Diesel Engine for ECU Testing on HiL, A. Ruggiero, <b>FIAT</b>	Vehicle Matrix Model for Performance Simulation, A. Klee, <b>Mercedes AMG</b> , B. Ürlings, <b>M-PLAN</b>
12:20	LUNCH	
13:50	Heat Rejection Determination using Diesel Predictive Combustion Modeling, F. Huck, <b>PSA</b>	Detailed modeling and optimization of a cooling valve using GT-Suite, S. Midrier, <b>Valeo</b>
	Detailed Investigation of an Expansion Intake Manifold using Simulation, M. Arnoletti, <b>Porsche Engineering</b>	The use of GT-SUITE in the Development of a WHR System Based on a Piston Expander ORC Engine, D. Ekenberg, <b>AVL-MTC</b>
	Concept Evaluation and Optimization of a 2-stage Charging System, P. Mühlebach, C. Lämmle, <b>Combustion and Flow Solutions</b> , D. Gohl, <b>sa-Charging Solutions</b> , P. Obrecht, <b>LAV-ETH</b>	Simulation of a Battery Electric Vehicle, M. Auer, T. Kuthada, N. Widdecke, J. Wiedemann, <b>Stuttgart University, IVK</b>
	Improved Fidelity Turbocharger Heat Transfer Models, M. Khare, <b>Jaguar Landrover</b> , J. Serrano, <b>CMT</b>	Dynamic Modelling of Battery Cooling Systems for Automotive Applications, F. Hasselby, <b>Volvo Cars</b>
15:10	REFRESHMENT AND EXHIBITION	
15:55	Next Release GT-SUITE v7.5, <i>Managing Complexity</i> – Part 2	
	Oil System Modeling of Hydrodynamic Speed Regulated Planetary Gears, P. Goretzki, <b>Voith Turbo</b>	
	Powertrain Thermal Modeling, A. Oberting, M. Auerbach, S. Grams, <b>Audi</b>	
	GT, 20 years of CAE Innovation & Future Development for the next Software Generation, v8.0, T. Morel, <b>GT</b>	
17:15	ADJOURN – BEER BREAK	

# Monday, 20 October 2014

20:00

Evening Dinner for Conference Attendees  
29,- euros Participation - Registration on [www.gtisoft.com](http://www.gtisoft.com)  
Location: Steigenberger Hotel

# Tuesday, 21 October 2014

09:00

## V7.5 SEMINARS IN STEIGENBERGER HOTEL

<b>AM Session</b> 09:00 to 12:00	<b>NEW</b> Hydraulics and Lubrication: Managing Complexity 1D and 3D simulation	Advanced Topics in Turbocharger Modeling	<b>NEW</b> Predictive Engine Friction Modeling Seminar	<b>NEW</b> New Option in GT-POWER for Cam- & Valvetrain Optimization	New Features in Vehicle, Transmission and HEV	New Development in Aftertreatment Modeling and Application Seminar	<b>NEW</b> Advanced Topics in Acoustics Modeling	<b>NEW</b> Advanced Topics in predictive SI Combustion	Engine Heat Distribution Models	New Features for Thermal Management GT-SUITE V7.5
<b>PM Session</b> 13:30 to 16:30	<b>NEW</b> Pump and NVH-Modeling in Hydraulic and Lubrication Systems	Advanced Topics in Turbocharger Modeling	Interfacing GT-SUITE with External Software	<b>NEW</b> New Option in GT-POWER for Cam- & Valvetrain Optimization	New Features in Vehicle, Transmission and HEV	New Development in Aftertreatment Modeling and Application Seminar	<b>NEW</b> Data Management in GT-SUITE for Collaboration and Sharing	<b>NEW</b> Advanced Topics in predictive Diesel Combustion	Engine Heat Distribution Models	New Features for Thermal Management GT-SUITE V7.5

**½ day Seminars - Free-of-charge - Participate in 2 Seminars in 1 day**

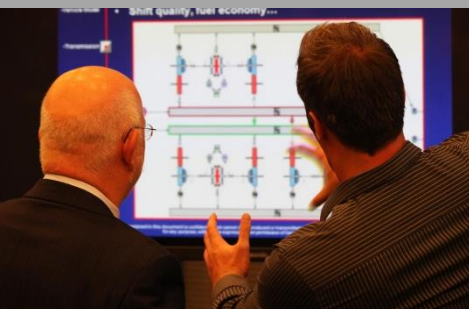
09:00

## TRAINING IN ESCHBORN CENTER

Vehicle Cooling Systems Modeling	Engine Analysis Modeling	Air Conditioning, Heat Pump & HVAC Systems	Rankine Cycle Waste Heat Recovery Systems	Lubrication System Modeling	Exhaust Aftertreatment And Emission Modeling	Hydraulics (VVA, Eng. Brake, Transmiss., Injection)	Vehicle & HEV Modeling
3 days	3 days	2 days	2 days	2 days	2 days	2 days	2 days

**More Information and Registration online: [www.gtisoft.com](http://www.gtisoft.com)**

## EXHIBITION



## DEMO SPOTS WITH LARGE SCREENS

SiL, HiL, RT  
VTM  
Aftertreatment  
Combustion

Lubrication/Hydraulics  
Vehicle/Transmission  
Valvetrain  
Acoustics

## SCIENCE CORNER

UNIVERSITIES PRESENTING THEIR RESEARCH WORK WITH GT-SUITE



## **GT CONFERENCE 2014**

### **The largest conference in 0D/1D Simulation**

More than 300 Participants from the Powertrain & Vehicle Industry

Demo Spots highlighting new developments

Science Corner – come & meet with university students

Free-of-charge Conference & Seminars.

20th Anniversary Dinner

Registration: [www.gtisoft.com](http://www.gtisoft.com)

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