

[Image courtesy of JLR ]

# Exa China PowerFLOW<sup>®</sup> Solution Forum 2017

Date&Time: September 15th,2017 9:00am-6:00pm Location: Hyatt Regency Hangzhou Fee: Free Orgnizer: Exa China Contact us Ms. Zhoujing Tel : + 86 135 2437 7050 Email : zhoujing@exa.com

### HYATT REGENCY HANGZHOU

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Hangzhou Xiaoshan Airport AP Shuttle bus South Station Line, switch to Metro Line 1 (Xianghu Direction), Exit B3

Hangzhou Railway Station, East Railway Station Metro Line 1 (Xianghu Direction) , Longxiangqiao Station, Exit B3





### Contact us

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# **SPEAKERS**

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## Key Note Speaker Dr. Wilko Jansen Jaguar Land Rover, Principal Technical Specialist

Current challenges in vehicle Thermal Management Discussion on challenges currently phased during vehicle development in Thermal management. These have been growing significantly over the last years for several reasons. Historically the main focus was on PT cooling airflow and component protection from exhaust radiation. This has now been extended to a whole new range of systems requiring thermal management. This has resulted in a significant effort on CAE capability development in wide range of commodities including electrification, brake cooling, infotainment etc.



#### Mr. Maximilian Ludwig Ganis NIO Co., Ltd, Aerodynamics Manager

Aero Thermal CFD Development at NIO

The implementation of an aero thermal and acoustics methodology at NIO using current state of the art CFD tools and best practices , and how this impacted the enhancement of our performance attributes in our latest vehicle development.



#### Dr. Jonathan Jilesen Exa Corporation, Principal Application Engineer

#### Exploring the impact of the rear diffuser on rear face contamination

Rear diffusers are frequently used to improve the aerodynamic performance of SUVs. These improvements are achieved by altering the angle at which the air leaves the underbody to achieve better balance with the flow coming down from the roof of the vehicle. This betterbalanced wake directs more the flow back towards the rear of the vehicle increasing the base pressure....



#### Mr. Seung-Sik Won Hanon Systems, Senior R&D Engineer

Aero-acoustic Study for Automotive Fan and HVAC in Hanon Systems

In this study, the prediction of aero-acoustic noise for automotive cooling fan and HVAC module using Lattice Boltzmann Method is discussed. The simulation and actual test result are compared each other. It shows a good coincidence relatively. In the axial fan study case, LBM helps to figure out where the noise source exists and the effect of flow propagation to recognize noise level differences caused by a small change of cooling module configuration. It also helps to understand what the key factor is for the specific frequency tonal noise from centrifugal multi blade fan case of HVAC module. Additionally, another study for cabin thermal comfort being conducted with PowerFLOW is introduced.



#### Mr. Tang Kebing Dongfeng Commercial Vehicles, Chief Engineer

HVAC analysis and validation based on PowerFLOW De-frost duct is designed in combination with both PowerFLOW and TEST facilities; By validation, simulation accuracy is corroborated, and test procedure is accordingly optimized. Finally the cold chamber test is passed on the first try.



## Key Note Speaker Dr. Sun Shaoyun FAW R&D, Aerodynamics Technical Director

Abstract : TBD



# **GEELY, Aerodynamics Chief Engineer**

PowerFLOW application of Aerodynamics development. 3) PowerFLOW application of Water management. 4) PowerFLOW application of Soiling.



#### Mr. Li Yingping Liebao Auto, Director Liebao CS9 SUV aerodynamics optimization

Based on the step by step improvement of the design, along with the design space exploration using a RSM(response surface method) methodology, the combined optimization was implemented for CS9, which resulted in a progressive improvement on the aerodynamics performance and achieved the target.





# Dr. Suresh Sundaram Exa Corporation, Senior Vice President

# Exa Product Strategy and Roadmap In this presentation you will learn about Exa's strategic

direction for simulation-driven design. The presentation will start by highlighting the critical capabilities and benefits of Exa's latest product releases, and will be followed by a description of Exa's product roadmap.

#### Mr. Li Fei Brilliance Auto R&D Center, Section Manager

An investigation of full vehicle thermal prediction and protection under severe operating conditions

Abstract: TBD



### Mr. Luo Biaoneng PowerFLOW applications for vehicle development at GEELY

1) PowerFLOW Application of wind noise performance. 2)