

CONVERGE Application Workshop: Hydrogen

Wednesday, 15 May 2024 · University of Orléans



AGENDA

- 9:00** **Registration and Welcome Coffee**
- 9:50** **Conference Opening & Welcome Remarks**
Rainer Rothbauer | *Convergent Science GmbH*
- 10:00** **Heavy-Duty H₂-ICE Combustion System Development Using CONVERGE**
Amer Avdic | *Daimler Truck AG*
- 10:30** **Heat Load Estimations for Durability Assessments of H₂ Combustion System**
Rafiq Babayev | *Volvo Group Trucks Technology*
- 11:00** **H₂ ICE: Virtual Development of a New DI Strategy for Improved Homogenization**
Sebastian Sulzer & Olga Ottersbach | *Schaeffler Technologies AG & Co. KG*
- 11:30** **Challenges, Workarounds and Future Modeling Efforts of H₂ ICE Combustion Simulations for Industrial Application** | Michael Blomberg | *FEV Europe GmbH*
- 12:00** **Networking Lunch**
- 13:00** **Interaction of Hydrogen Jets and Underlying Charge Motion and Its Impact on Mixture Homogeneity and Combustion** | Lorenz von Roemer | *IAV GmbH*
- 13:30** **Exploring Hydrogen Low NO_x (HYLON) Burner With Large Eddy Simulations**
Suresh Nambully | *Convergent Science*
- 14:00** **Optimizing a Dedicated Heavy-Duty Hydrogen DI Combustion System Using Experimental and Numerical Workflow** | Vincent Giuffrida | *IFP Energies nouvelles*
- 14:30** **URANS H₂ Supersonic Jets** | Kacper Kaczmarczyk | *University of Bath*
- 15:00** **Networking Break**
- 15:30** **Hydrogen Injection and Mixing in a Direct Injection Engine**
João Mota Ferreira | *University of Orléans*
- 16:00** **Simulating Hydrogen Storage Tank Filling with CONVERGE**
Efe Kinaci | *Convergent Science*
- 16:30** **Modeling Proton Exchange Membrane (PEM) Fuel Cells in CONVERGE**
Marcos Burgo Beiro | *Convergent Science GmbH*
- 17:00** **Closing Remarks** | Rainer Rothbauer | *Convergent Science GmbH*
- 17:20** **Technical Tour - PRISME Laboratory**
- 20:00** **Networking Dinner** | Garden ICE Café