

# CONVERGE Application Workshop: Solutions for Low-Carbon Transportation

June 11, 2024 · Politecnico di Torino - Energy Center



## AGENDA

- |       |  |       |  |
|-------|--|-------|--|
| 9:00  | Registration and Welcome Coffee  | 13:30 | Numerical Approaches for the Development of Carbon-Free IC Engines   Riccardo Sola   <i>Politecnico di Torino</i>                            |
| 9:50  | Conference Opening & Welcome Remarks<br>Kelly Senecal   <i>Convergent Science</i>  | 14:00 | Virtual Design of Low-Carbon Fuel Combustion Systems for a Large Bore Marine Engine<br>Matteo Luci   <i>Dumarey Automotive Italia S.p.A.</i> |
| 10:00 | Ducted Fuel Injection Simulations: LES to RANS Transition to Speed up Low-Emission ICEs Development   Andrea Bianco   <i>Gammatech Engineering Srl</i>   | 14:30 | Exploring Hydrogen Low NOx (HYLON) Burner with Large Eddy Simulation   Matteo D'Elia   <i>Convergent Science</i>                             |
| 10:30 | Development of an Advanced Modeling Framework Based on the G-Equation Concept for Future SI Engine Combustion Systems   Josep Gomez-Soriano   <i>University in Valencia - CMT</i>                              | 15:00 | Networking Break   |
| 11:00 | Experimental and Numerical Analysis of Hydrogen Injection for Mixture Formation Investigation in an Internal Combustion Engine for Heavy-Duty Applications<br>Francesco Pucillo   <i>Politecnico di Torino</i> | 15:30 | Simulating Hydrogen Storage Tank Filling With CONVERGE<br>Jyothish Venkataramanan   <i>Convergent Science</i>                                |
| 11:30 | Virtual Concept Selection of H2 ICE Retrofit Kit Components<br>Vincenzo Pezza   <i>Dumarey Automotive Italia S.p.A.</i>  | 16:00 | Modeling Proton Exchange Membrane (PEM) Fuel Cells in CONVERGE   Shenol Kyupeli   <i>Convergent Science</i>                                  |
| 12:00 | Networking Lunch   | 16:30 | Closing Remarks   Kelly Senecal   <i>Convergent Science</i>  |
|       |  | 17:00 | Technical Visits   Dumarey Automotive Italia   |
|       |  | 17:30 | Technical Visits   Politecnico di Torino   |
|       |  | 20:00 | Networking Dinner   Società Canottieri Armida  |