

SPECIAL SESSION ON
Multi-level models for simulation of electrified vehicle

Within the framework of the PANDA H2020 European Project

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The development of innovative electrified vehicles is a key step before building their prototypes. However, various components have to be designed and integrated into subsystems or in the global system. In that aim, for the same component different levels of the model are required from the most detailed and accurate to the most simple and global. In some new simulation packages, the level of the component model can be selected in function of the study objective.

For example, the H2020 PANDA project aims to develop a unified modeling approach in order to a couple of different models for simulation and testing innovative concepts of electrified vehicles. All components will be developed with different model levels to enable flexibility.

This special session is focused on the development of multi-level models of components and/or subsystems of electrified vehicles to be integrated into the simulation. The applications could be the sizing, analysis, control, energy management, thermal strategy, performance determination of the studied vehicle. The interest of using multi-level models should be highlighted. The comparison of the different models for a defined objective could also be of interest. This special session is open to the members of the PANDA project but also to other contributors in order to share various experiences.

Topics of interest include, but are not limited to:

- simulation of battery electric vehicle, hybrid vehicles or fuel-cell vehicles, etc.
- simulation of cars, truck, buses, subways or trains, etc.
- multi- models of energy storage subsystems, electric drives, power converters or control units, etc.

Deadlines:

Submission of digest: April 21, 2019

Notice of acceptance: June 23, 2019

Submission of full papers: July 28, 2019

See <http://www.vppc2019.org/> for more information.