

## Special Session Description

Session Title: **NURESAFE multi-physics and multi-scale developments and applications for nuclear reactors**

Subject Area: 9. Multiphysics Power Reactor Simulation

### Organizers

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### Description

Within the framework of several EU funded projects the NURESIM (NUclear REactor SIMulation) European simulation platform has been developed. This platform provides a standardized environment for advanced core physics, two-phase thermal-hydraulics, fuel modeling and multi-scale and multi-physics features together with sensitivity and uncertainty tools.

The session provides insights into the developments within the NURESIM platform with special focus on coupling of codes for multi-physics applications. In addition combined multi-scale and multi-physics applications based on platform Computational Fluid Dynamics codes will be presented.