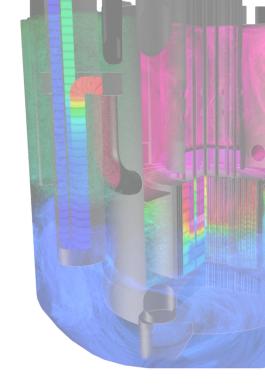


Summer school

Digital Twins: New Horizons in Nuclear Reactor Design and Optimisation

August 23 to September 1, 2023 Karlsruhe, Germany



Program

Opportunities in Developing Digital Twins for Existing and Future Nuclear Reactors (4 h)

Methods for Data Management and High-Performance Computing (7 h)

Computer-based Materials and Fuel Developments (6 h)

Advanced Methods in Nuclear Data and Reactor Physics (6 h)

High-Fidelity Nuclear Thermal-Hydraulics (6 h)

Nuclear Design and Licensing Using Multiphysics Modelling and Simulation (5 h)

Seminar - From Aerospace to Nuclear: the Benefits of Digital Twins (2 h)

Group activities (6 h)

Technical visits

Lecturers

Etienne Décossin (EDF) FR Nawal K. Prinja (Jacobs) UK

Ryan McClarren (Univ. Notre Dame) US Martin Frank (KIT HPC Center) DE Mark Asch (CNRS) FR

Luca Messina (CEA) FR, Petr Grigorev (AMU) FR Davide Pizzocri (Polimi) IT, Kyle Gamble (INL) US

Oscar Cabellos (UPM) ES Luca Fiorito (SCK-CEN) BE

Miguel Alfonso Mendez (VKI) BE Antoine Gerschenfeld (CEA) FR

Frédéric Bertrand (CEA) FR Vaihbav Yadav (INL) US

To be defined

Application deadline 20/05/23





