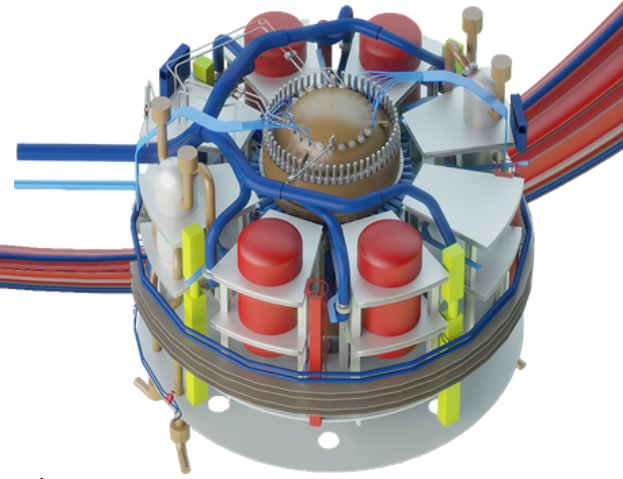


FJOH



Summer school

Innovative Approaches for Streamlining the Design, Deployment, and Operation of Near-term and Emerging Reactors

August 21 to August 30, 2024
Aix-en-Provence, France

Application
deadline
20/05/24

Program

Conceptual Reactors into Operating Reactors (2 h)

The Broad Challenges of Research & Innovation Facing the New Nuclear - A TSO Point of View

Reactor Physics (6 h)

From Legacy to Current LWR Modelling Methods & Industry Practices, Lessons Learned from Operation

Advanced Methods for Fast Reactor Core Simulations: How to Balance Modelling Trade-offs

Thermo-Hydraulics (6 h)

Potentials and Challenges of 3D & CFD Codes for Improved Analysis of Thermal-hydraulic Phenomena

Coupled Methods and Codes for Improved Transient Simulations in a NuScale-type Reactor

Advantages and Limitations of Coupled-code Simulations for Analysing Accident Scenarios in Water-cooled SMRs

Fuel Elements (6 h)

From Legacy to Current Modelling Methods & Industry Practices and Gaps

Advanced Methods and High-fidelity Tools

Hybrid Approaches for Acceleration: The Example of Accident Tolerant Fuels (ATFs)

Integration, Coupling, Safety, Supply Chain Issues: Expectations and Acceleration Levers for Various Applications (10 h)

Seminar (2 h)

How the COVID-19 pandemic has challenged and accelerated research and development of treatments and vaccines

Group Activities (6 h) - Technical visits

Mentors: C. Demazière (Chalmers Univ.), J.-B. Droin (CEA), P. van Uffelen (EC/JRC), D. Pizzocri (POLIMI), A. Scolaro (EPFL)

Lecturers

P. Giordano (IRSN) *FR*

M. Ouisloumen
(Westinghouse) *US*

J.-F. Vidal (CEA) *FR*

C. Vazquez-Rodriguez
(FZJ) *DE*

L. Vyskocil (UJV) *CZ*

K. Zhang (KIT) *DE*

R. Largenton (EDF) *FR*

R. Masson, B. Michel (CEA) *FR*

P. Xu (INL) *US*

F. Morin (CEA) *FR*

D. Lee (UNIST) *KR*

I. Sanda (SCK.CEN) *BE*

L. Tardieu (STELLARIA) *FR*

A. Iuvara (CAELUS) *IT*

R. Legrand (CEA) *FR*