

# FR26: From Innovation to Implementation



**Monday 18 May 2026 - Thursday 21 May 2026**

**Beijing, China**

## Scientific Programme

## **Track 1. Innovative Fast Reactor Designs**

• *Advanced fast reactor concepts, including core, systems, and components design, small modular fast reactors, and deployment strategies aligned with future energy systems.*

## **Track 2. Fast Reactor Safety and Licensing**

• *Safety approaches, analysis methods, passive systems, severe accident behaviour, 3S (Safety, Security, Safeguards), safety requirements and the regulatory framework for fast neutron reactors.*

## **Track 3. Fuel Cycle Technologies and Sustainability**

• *Fuel cycle strategies and their impacts on waste minimization, hydro and pyro processes and associated waste streams, infrastructures, enablers (e.g., transportation).*

## **Track 4. Fast Reactor Fuels and Materials**

• *Fuel and structural materials, coolant chemistry and related technologies.*

## **Track 5. Test Facilities and Experiments**

• *Experimental infrastructure and test facilities, including component tests, and integral experiments.*

## **Track 6. Modelling and Simulation**

• *Computational methods, multi-physics tools, validation and verification, and the use of AI and machine learning.*

## **Track 7. Economics, Integrated Systems, and Non-Electric Applications**

• *Economic assessments, integration with other energy systems, non-electric uses (e.g. hydrogen production and desalination).*

## **Track 8. Commissioning, Operation and Decommissioning**

- *Practical experience in starting up, operation, maintenance, and decommissioning of fast reactors, including instrumentation and control technologies, in-service inspections, and management of waste streams.*

## **Track 9. Public Engagement, Knowledge Management, and Education and Training**

- *Approaches and experiences for building public support, stakeholder engagement, knowledge preservation, and training to support long-term development.*