

# **IAEA Technical Meeting on Proliferation Resistance Features of Fast Reactors and Associated Fuel Cycles**



**Monday 18 August 2025 - Friday 22 August 2025**

**IAEA Headquarters, Vienna, Austria**

## **TM Programme**

## **Track 1: Evaluation of Proliferation Resistance of Fast Reactors and Associated Fuel Cycles: Methodologies, Definitions, Assessment and Metrics**

- International Collaboration and Experience Sharing
- Capacity building for Fast Reactors advancement and Fuel Cycle development
- Simulation tools and nuclear data
- 3S by designs
- Economic consideration: Maintaining a balance between resistance to nuclear proliferation, nuclear and physical nuclear safety, as well as economic considerations

## **Track 2: Reactor Design Features for Enhancing Proliferation Resistance**

- Once-Through High Burnup Cores
- Advanced fuel types (metallic, carbide, nitride fuels, etc.)
- Fast Reactor Design Aspects
- PR Fuels, composition, and reactor safety related issues

## **Track 3: Proliferation Resistance Considerations for Nuclear Fuel Cycles**

- Included TRU one-site Cycle
- Fuel Cycle Option Consideration
- Reprocessing Technologies

-PR Fuels, composition, production, and safety related issues

## **Track 4: Safeguardability of Fast Reactors and Associated Fuel Cycles**

-Innovative verification techniques

-Design decisions that facilitate safeguards verification