

Session Program

8-12 Jun 2026

2nd Fusion Neutronics Meeting 2026

Fusion Reactor Design and Safety

Karlsruhe Institute of Technology, Campus north, FTU
Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

Monday 8 June

14:30

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

14:30–14:50

The latest release of ITER Tokamak model: E-lite_R250630

Speaker

Aljaz Kolsek

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

14:50–15:10

Best Estimate ITER Mode-0 Radiation Maps

Speaker

Gabriel Pedroche

Location

Online

15:10–15:30

Best Estimate ITER Full Model for radiation safety demonstration

Speaker

Pol Guijosa

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

15:30

Tuesday 9 June

10:00

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

10:00–10:20

An overview of STEP Breeder Blanket nuclear analysis using OpenMC

Speaker

Henry Marden

10:20–10:40

Parametric Multiphysics Workflow for Evaluating Tritium Breeder Blanket Performance

Speaker

Alexandre Sureda Croguennoc

10:40–11:00

Neutronics Analysis of Ceramic Breeder blankets for the Infinity 2 Stellarator

Speaker

Jonathan Naish

11:00

Wednesday 10 June

10:00

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

10:00–10:20

Neutronics analyses of the VNS divertor and lower port

Speaker

Aljaž Čufar

10:20–10:40

Comprehensive Neutronics Analysis of Shielding Performance and Effects on Tokamak and building Structures in a Volumetric Neutron Source

Speaker

Jin Hun Park

10:40

11:10

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

11:10–11:30

Neutronics simulations for magnetic diagnostics in DEMO

Speaker

Raul Luís

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

11:30–11:50

Preliminary design and assessment of a Fusion-Fission Hybrid TBM for Tokamak Devices

Speaker

xilong Tong

Location

Online

11:50–12:10

Neutronics Activities at ENEA-Frascati: Experimental and Computational Developments

Speaker

Fabio Moro

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

12:10–12:30

Study of Activated Corrosion Products supporting the ITER and fusion pilot plant reactors: from neutronics to safety analyses and experiments

Speaker

Simone Noce

12:30

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

Friday 12 June

09:00

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

09:00–09:20

Activation Analysis and Radiological Assessment of the ITER X-Ray Crystal Survey Spectrometer for Interspace Support Structure

Speaker

Bhargav Soni

Location

Online

09:20–09:40

Comprehensive modeling of activated water radiation sources of ITER Tokamak Cooling Water System

Speaker

Dr Pablo Martínez Albertos

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

09:40–10:00

From Tokamak to Research Reactor: Replicating JET Water Activation Experiment at KATANA Facility

Speaker

Julijan Peric

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

10:00–10:20

Evaluation of SRO mode-0 conditions and TSSI design

Speaker

Alvaro Cubi

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

10:20–10:40

Neutron Transport Analysis for ITER DNFM in situ Calibration in the Tokamak Environment

Speaker

Egor Afanasenko

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

10:40

11:10

Fusion Reactor Design and Safety

Session |

Location: Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

11:10–11:30

Stellarator reactor modeling and simulation approach using a fast-meshing method for MCNP6

Speaker

Yuefeng Qiu

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

11:30–11:50

Assessment of Divertor Activation Caused by 14.1 MeV Neutron Streaming through Monoblock and Inter-Module Gaps

Speaker

Seonghee Hong

Location

Online

11:50–12:10

Radiation safety analyses of EAST tokamak for the D-T experiment campaign

Speaker

Kun XU

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

12:10–12:30

OpenMC Verification and Validation for Well Logging Applications

Speaker

Bor Kos

Location

Karlsruhe Institute of Technology, Campus north, FTU, Hermann-von-Helmholtz-Platz 1, 76344 Eggenstein-Leopoldshafen

12:30