Session Program

Sep 16 – 18, 2024

9th Annual RaDIATE Collaboration Meeting

Talks

Granada

Mon, September 16

10:15 AM

Talks: Talks

Session | **Location:** Granada

10:15 – 10:50 AM **Irradiation Capabilities of IFMIF-DONES and Future Research Opportunities**

Speaker
Dr Claudio Torregrosa-Martin

10:50 AM

11:20 AM

Talks

Session | **Location:** Granada

11:20 – 11:45 AM **Overview of IFMIF-DONES Lithium Systems**

Speaker
Jorge Maestre

11:45 AM – 12:10 PM
Proton beam irradiation facility at J-PARC and activity on displacement damage study

Speaker
Shin-ichiro Meigo

12:10 – 12:35 PM **RaDIATE activities at J-PARC**

Speaker
Shunsuke Makimura

12:35 PM

2:00 PM

Talks

Session | **Location:** Granada

2:00 – 2:25 PM **FRIB Facility Status Update**

Speaker
Andreas Stolz

2:25 – 2:50 PM **Nuclear materials research at the University of Birmingham**

Speaker
Prof. Yu-Lung Chiu

2:50 – 3:15 PM
Post irradiation examination techniques for characterization of highly irradiated components at the Spallation Neutron Source

Speaker
David McClintock

3:15 PM

3:45 PM

Talks

Session | **Location:** Granada

3:45 – 4:10 PM
Insights into radiation resistance of titanium alloys from displacement cascade simulations

Speaker
Ankit Roy

4:10 – 4:35 PM **LANSCE Activity Overview**

Speaker
Tarik Saleh

4:35 – 5:00 PM

Low Energy Proton and Helium Beam Irradiation and Post Irradiation Examination Plan for the Study of Second Target Station Beam Interception Materials

Speaker
Yong Joong Lee

5:15 PM

Tue, September 17

9:00 AM

Talks

Session | **Location:** Granada

9:00 – 9:25 AM **CIEMAT Hot cells project for DONES samples**

Speaker
Rafael Vila

9:25 – 9:50 AM **Investigation of radiation damage of fine-grain graphite for target applications**

Speaker
Alex Comyn

9:50 – 10:15 AM
Innovative experimental approaches to understand microstructural defect evolution during irradiation under high-temperature and mechanical strain

Speaker
Marcelo Roldán Blanco

10:15 – 10:40 AM **Ab initio study of cementite – α-Fe interfaces under irradiation**

Speaker
Pablo Canca López

10:40 AM

11:20 AM

Talks

Session | **Location:** Granada

11:20 AM – 12:05 PM
Assessment and comparison of EUROFER97 transmutation in IFMIF-DONES and DEMO

Speaker
Irene Álvarez Castro

12:05 – 12:30 PM
Towards a Standardised Methodology of Radiation Damage Defect Distributions for Microstructure Evolution Models

Speaker
Abel Carlos Gutiérrez Camacho

12:30 PM

2:00 PM

Talks

Session | **Location:** Granada

2:00 – 2:25 PM **Machine Learning Interatomic Potentials for Fusion Oriented Materials**

Speaker
Pedro Julián Delgado Galindo

2:25 – 2:50 PM **Novel materials for high-power accelerator components**

Speaker
Kavin Ammigan

2:50 – 3:15 PM

Computational Exploration of High Entropy Alloys as Promising Materials for Future Beam Windows

Speaker
Gaurav Arora

3:40 PM

3:45 PM

Talks

Session | **Location:** Granada

3:45 – 4:10 PM

Multiphysics Simulations of Nanofibrous High Power Targets for the Inference of Failure Modes

Speaker
William Asztalos

4:10 – 4:35 PM

Challenges and opportunities for the thermal interface selection and diffusion bonding in the STS target segment

Speaker
Justin Mach

4:35 PM

Wed, September 18

9:00 AM

Talks

Session | **Location:** Granada

9:00 – 9:25 AM

In-situ observation of deformation mechanisms in fine-grained nuclear graphite by high temperature disc compression

Speaker
James Marrow

9:25 – 9:50 AM

Study of Thermal Requirements in the HFTM using Finite Element and Monte Carlo Simulations.

Speaker
José Miguel Palomino Cobo

9:50 – 10:15 AM **Dynamic Thermomechanical Simulations of IFMIF-DONES Target's Back-Plate failure**

Speaker
Manuel Antonio Vázquez Barroso

10:15 – 10:40 AM **Developments on RaDIATE-related R&D for CERN's Beam Intercepting Devices**

Speaker
Nicola Solieri

10:40 AM

11:20 AM

Talks

Session | **Location:** Granada

11:20 – 11:45 AM **Simulating Radiation Damage in ISIS Targets**

Speaker
Dan Wilcox

11:45 AM – 12:10 PM **Nuclear-grade Graphite as Target Material for High Energy Physics Applications**

Speaker
Dong (Lilly) Liu

12:10 – 12:40 PM **RaDIATE Material Groups kickoff meeting**

12:40 PM

2:00 PM

Talks: Closing session

Session | **Location:** Granada

2:00 – 3:00 PM **Closing session**

Speaker
Frederique Pellemoine

3:00 PM