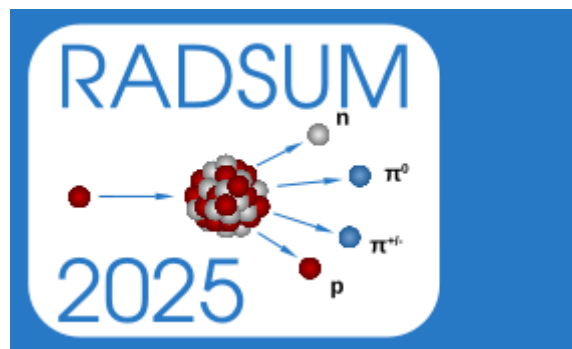


## Session Program

15-17 Jan 2025



## **RADSUM - Topical Workshop on RADiation effects in SUperconducting Magnets**

### ***Modelling of radiation effects in superconductors***

CERN, 30/7-018 - Kjell Johnsen Auditorium

# Thursday 16 January

08:30

## Modelling of radiation effects in superconductors

**Session** | **Location:** CERN, 30/7-018 - Kjell Johnsen Auditorium | **Convener:** Daniele Torsello

08:30–08:50 **Radiation effects on HTS: improved pinning vs. pair breaking**

**Speaker**

Michael Eisterer

08:55–09:15

**Pinning regimes and modeling of flux trapping relevant to HTS in the radiation environment of fusion reactors**

**Speaker**

Roland Willa

09:20–09:40

**Molecular dynamics simulations of radiation-induced defects**

**Speaker**

Davide Gambino

09:45–10:05

**Density functional theory modelling of the defect structures in irradiated REBCO coated conductors**

**Speaker**

Rebecca Nicholls

10:10–10:30

**First-principles study of defect formation and diffusion in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>**

**Speaker**

Li Yang

10:35

11:00

## Modelling of radiation effects in superconductors

**Session** | **Location:** CERN, 30/7-018 - Kjell Johnsen Auditorium | **Convener:** Daniele Torsello

11:00–11:20

**Threshold Displacement Energies of Oxygen in YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7</sub>: A Multi-Physics Analysis**

**Speaker**

Mr Ashley Dickson

11:25–11:45

**Present state-of-the-art dpa models**

**Speaker**

Fredric Granberg

11:50–12:10

**Displacement damage modelling in the FLUKA Monte Carlo code**

**Speaker**

Francesc Salvat Pujol

12:15–12:35

**DPA modeling in the PHITS code**

**Speaker**

Yosuke Iwamoto

12:40