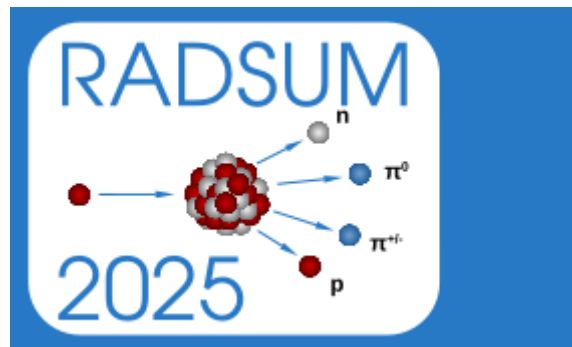


Session Program

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 YBa₂Cu₃O₇

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 YBa₂Cu₃O₇: 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