

[Track4] Fuel Performance Code III (OFFBEAT)

- **Development of a high-fidelity PCMI database using multidimensional OFFBEAT simulations for surrogate modeling in nuclear fuel performance codes**

Marco Barbieri(University of Bologna),Alessandro Scolaro(Paul Scherrer Institute),Carlos Aguado Basabe(Centro de Investigaciones Energéticas, MedioAmbientales y Tecnológicas),Alessia Foschini(University of Bologna),Simone Gianfelici(Italian National Agency for New Technologies)

- **Reduced order modelling of PCMI with machine learning**

Janne Heikinheimo(VTT Technical Research Centre of Finland Ltd),Asko Arkoma(VTT Technical Research Centre of Finland Ltd),Alessandro Scolaro(Paul Scherrer Institute, Laboratory for Reactor Physics and Thermal-Hydraulics),Milica Krstovic(École Polytechnique Fédérale de Lausanne),Pau Aragon(European Commission, Joint Research Centre),Paul van Uffelen(European Commission, Joint Research Centre)

- **Uncertainty Quantification and Sensitivity Analysis in Multidimensional PCMI Modeling: OFFBEAT Coupled with DAKOTA for Risø-III Cases AN3 and AN8**

Carlos Aguado(Centro de Investigaciones Energéticas, MedioAmbientales y Tecnológicas),Grazia Corrias(Università di Pisa),Marco Barbieri(Università di Bologna/Italian National Agency for New Technologies),Michela Angelucci(Università di Pisa),Alessandro Scolaro(École Polytechnique Fédérale de Lausanne),Francisco Fera(Centro de Investigaciones Energéticas, MedioAmbientales y Tecnológicas),Luis Enrique Herranz(Centro de Investigaciones Energéticas, MedioAmbientales y Tecnológicas)

- **A mechanistic framework for deriving fuel relocation models for 1D fuel performance codes from 3D fragment simulations**

Milica Krstovic(École Polytechnique Fédérale de Lausanne),Alessandro Scolaro(Paul Scherrer Institute),Mathieu Hursin(École Polytechnique Fédérale de Lausanne)