

Computational applications in nuclear technology

Session organizers

1. Alicia Doval, INVAP S.E., San Carlos de Bariloche, Argentina.
2. Juan C. Garcia, Centro Atómico Bariloche (CNEA), Instituto Balseiro, San Carlos de Bariloche, Argentina.
3. Federico E. Teruel, Centro Atómico Bariloche (CNEA), CONICET, Instituto Balseiro, San Carlos de Bariloche, Argentina.

Description

This session is intended to discuss the use, development and implementation of computational tools and numerical methods to study thermal-hydraulic aspects of the nuclear field. More specifically, but not exclusively, some of the topics of interest are: thermal fluids and conjugate heat transfer, boiling heat transfer and critical heat flux, thermal-hydraulics related to reactor safety, design of fuel assemblies (rod bundles, parallel plates) under different thermal-hydraulic conditions, containment and confinement behaviour for reactor systems during accidental conditions, as well as, computer codes commonly used in licensing analyses, model and quantification of uncertainties, multi-phase flow phenomena relevant to nuclear system, computational fluid dynamics (CFD) and coupled codes.