

Multi-Scale Uncertainty Quantification in Reactor Core Calculation

Y. P erin*, A. Aures*, V. Salino**

Motivation

IRSN and GRS decided to jointly assess the ability of their simulation codes' chains to predict uncertainties of power distributions. Two generic GEN-III cores are studied: an UOX core and a partially MOX-loaded core. Various sources of uncertainties affect the power distribution: the uncertainties of basic nuclear data and those due to modelling approximations and the application of different numerical methods.

