Introduction to MCNP6

4–8 March 2024
OECD/NEA Headquarters in Boulogne-Billancourt, France
Minimum enrollment: 12; maximum enrollment: 24

This 4.5-day introductory class is designed for people who have no experience in running MCNP Monte Carlo calculations. Provided examples will be assembled, executed, and examined. Time will be available throughout the week to discuss individual questions and problems with MCNP experts.

Tentative Agenda

Day 1, 1000–1230; 1330–1700
- AM: MCNP History & Applications
- PM: MCNP Basic Input File Structure, and Calculation Execution

Day 2, 0900–1230; 1330–1700
- AM: MCNP Basic Input File Structure, and Calculation Execution (continued)
- PM: Radioactive Source Terms

Day 3, 0900–1230; 1330–1700
- AM: Tallies and Statistics
- PM: Neutron Physics & Cross Sections, Electron & Photon Transport

Day 4, 0900–1230; 1330–1700
- AM: Criticality
- PM: Variance Reduction

Day 5, 0900–1230
- AM: Unstructured Mesh, MCNPTools, and the MCNP Intrinsic Source Constructor
- PM (Optional): Open Discussion / Questions and Answers

The class is based on version 6.2 of the MCNP code but can include discussion of MCNP6.3 topics and resources at the attendee's request. Students must provide their own laptop with MCNP6.2 or MCNP6.3 installed (with Windows installation tutorials here and here, respectively).

More information on the MCNP code is available at mcnp.lanl.gov.