

A General Monte Carlo N-Particle (MCNP) Transport Code

Intermediate MCNP6

9-13 November 2020

Class length: 5 days of instruction
Time: 10:00 Monday to noon Friday
Place: JAEA, Tokyo, Japan

This 5-day introductory class is designed for people who have some experience in running MCNP Monte Carlo calculations, but would like to refresh or advance their skills. It covers a quick overview of the MCNP basics and then advances into more complex features within the code. In addition to the basic introduction material covering code input, geometry, plotting, sources, tallies, physics tables, criticality, and variance reduction, the intermediate level class topics include:

New features in MCNP6:

MCNP6 basics

Advanced CSG Geometry
universes, lattices, repeated structures

Advanced Source Definitions
repeated sources, surface source read/write

Advanced Tallies & Variance Reduction
repeated tallies, perturbations, pulse-height tallies, dxtran, weight windows

Introduction to Parameter Studies, Intrinsic Source Generation, MCNPTools

You are expected to have some experience with MCNP.

The class will be based on the latest release of MCNP6 code. **You should hold a licence for the export controlled MCNP6.2 software.** The only distribution centre for this software is RSICC, please request your licence at <https://rsicc.ornl.gov/>

Address all correspondence regarding this class to programs@oecd-nea.org