



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

Intermediate MCNP6

22-26 June 2020

Class length: 5 days of instruction

Time: 10:00 Monday to noon Friday

Place: NEA, Boulogne-Billancourt (Paris), France

Number accepted in class: 18

Minimum enrolment required: 8

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