

GNDS/ FUDGE/GIDIplus introductory in-person training course

10-13 June 2025
Nuclear Energy Agency, Paris, France

Tentative Agenda

Start	End	Day 1_ Tuesday 10 June
09:00	09:30	Welcome and Setup
09:30	10:20	Introduction
		<ul style="list-style-type: none"> ○ Overview of nuclear structure , decay and reaction data needed by users
10:20	10:35	Coffee-break
10:35	11:30	Overview of GNDS-2.1 and mapping to data user needs
		<ul style="list-style-type: none"> ○ High-level overview of the types of data (evaluated and processed) stored in GNDS and the purpose of the 'styles' section.
11:30	13:00	Lunch
13:00	14:00	FUDGE installation and quick introduction
14:00	15:30	Closer look at evaluated data in GNDS
		<ul style="list-style-type: none"> ○ Examples of various ways of storing cross sections, product multiplicities and distributions, resonance parameters, fissionFragmentData, etc
		<ul style="list-style-type: none"> ○ ENDF-6 – GNDS data type matrix (how various MF sections map onto GNDS)
		<ul style="list-style-type: none"> ○ Examples of accessing and visualizing evaluated data
15:30	15:45	Coffee-break
15:00	16:30	Evaluated data special topics: covariances, atomic interactions, TNSL, charged-particle elastic scattering, fission product yields
19:00		Social event/dinner

Start	End	Day 2_ Wednesday 11 June
09:00	10:20	Detailed look at PoPs: nuclear structure, masses, decays, atomic relaxation
10:20	10:35	Coffee-break
10:35	11:30	Examples of data mining with PoPs
		<ul style="list-style-type: none"> o Discuss relationship between PoPs and the ENSDF modernization effort
11:30	13:00	Lunch
13:00	14:15	xData: base FUDGE classes for storing functions
14:15	15:00	Using FUDGE to check formats and physics
		<ul style="list-style-type: none"> o ENDF-6 translation, schemas for GNDS format checking, checkGNDS and energyBalance for physics checking
15:00	15:15	Coffee-break
15:15	17:30	Case study: using FUDGE to find and fix problems in evaluated nuclear data libraries

Start	End	Day 3_ Thursday 12 June
09:00	09:45	Detailed look at derived data types
09:45	10:15	Introduction to processProtare
10:15	10:30	Coffee-break
10:30	11:30	Visualizing processed data, example processing code comparisons, ACE file generation
11:30	13:00	Lunch
13:00	15:15	Overview of other useful FUDGE scripts
		<ul style="list-style-type: none"> o energySpectrum, peek, diffGNDS, temperatures, etc.
15:15	15:30	Coffee-break
15:30	17:30	Introduction to GIDplus, MCGIDI and G4LEND

Start	End	Day 4_ Friday 13 June
09:00	09:45	GNDS development roadmap
		○ Known issues in GNDS-2.0
		○ New types of data for next GNDS standard
09:45	10:15	Tips for writing FUDGE scripts
10:15	10:30	Coffee-break
10:30	11:30	Wrap-up + time for attendee questions, conclusion
11:30	13:00	Lunch