Kraken workshop overview

This workshop provides an overview of the Kraken framework developed at VTT Technical Research Centre of Finland Ltd and distributed for non-commercial use via OECD/NEA Data Bank (since April 10th 2024) and RSICC (soon).

Information and inputs are provided for applying Kraken to modelling the LDR lite:

https://www.ldr-reactor.fi/en/ldr-lite-benchmark/

You can have a good time even if you don't have Kraken yet.

All of the material is available at the Kraken Wiki after the workshop:

https://serpent.vtt.fi/kraken/index.php/Kraken_workshop_PHYSOR_2024

Schedule overview

- 8:00 - 8:10   Welcome, overview of the schedule, any initial questions
- 8:10 - 9:00   Overview of Kraken, its solvers, current and future applications
- 9:00 - 9:20   KrakenTools Python package, what does it contain, some examples related to Serpent
- 9:20 - 10:00   Cerberus multi-physics driver: basics and using Serpent through it.
  Break
- 10:15 - 10:45   Introduction to the LDR-50 SMR concept and LDR lite
- 10:45 - 11:50   Modelling LDR lite with Kraken: Static simulations, fuel cycle simulations, how to shuffle fuel and how to run transients
- 11:50 - 12:00   Workshop end, any final questions, what next?