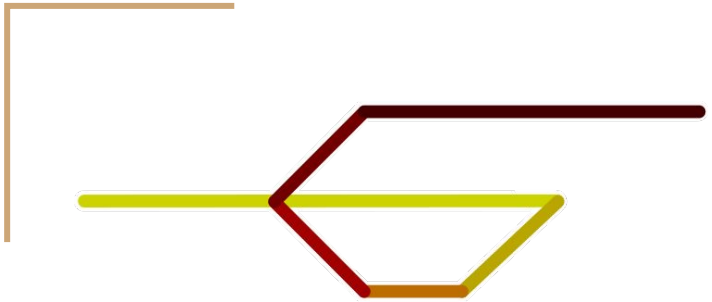

Purpose and History of 2nd Annual Technical Workshop on Fuel Cycle Simulation

University of South Carolina - July 19th - 21st, 2017

Last Year

From July 6th - 8th, 2016 CNRS/IN2P3 hosted the “Technical Workshop: Dynamic Nuclear Fuel Cycle” at the Institut d'Astrophysique de Paris.

Dynamic fuel cycle simulation codes are promising tools for assessing nuclear fuel cycle future options. Several institutions or laboratories around the world develop their own tools, based on various philosophies, with different objectives and implementation choices. The dynamics generated by initiatives involved research teams [...] should be maintained in order to support and develop collaborations around nuclear scenarios studies.

Last Year

To this end, the workshop last year was a success. We heard from:

- 24 speakers
  - 30 minute talks
  - 10 minutes for questions
- 16 Institutions
- 6 Countries
- 4 Tracks
  - Fuel cycle simulation tools
  - Transition analysis
  - Global and opening scenario related question
  - Uncertainty and Optimization Analysis

However...

Format Feedback

The most commonly echoed feedback was that **the open discussion sessions** at the end of the workshop was the most valuable portion of the 2016 workshop.

Format Feedback

This year we are attempting to incorporate this feedback into the structure of the workshop.

Assumptions:

- We are all fuel cycle experts
- We all know, in at least broad terms, the limits of each other's codes
- Engaged discussion is the most beneficial to the community
- We are all here to participate

This year's format will be slightly different...

Workshop Format: Presentations

This year the talks will be:

- **10 minutes**, rather than 30
- **5 minutes** for questions, rather than 10

This is similar to “Rolling Thunder” talks.

We encourage presenters to dive into the interesting details and to *skip the basics*.

Workshop Format: Discussion

The presenters for each block of 2-3 talks will lead a discussion:

- Discussion sessions last **30 - 45 minutes**
- Each workshop attendee is encouraged to comment
- The presentations serve as a launching point for the discussion
  - The discussion need not be limited to the presentation topics
- This is not a panel discussion

Notes will be kept for this portion.

You are encouraged to add to the notes at https://tinyurl.com/ybowjsuf

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Workshop Format: Breakouts & Summary

On the first two days, we will have breakout sessions at the end of the day.

During these times, we encourage participants to self-assemble into smaller groups around topics of interest.

On the last day, during lunch, we will communally decide on a summary statement for the workshop.

After the workshop, all attendees will be invited to participate in a paper summarizing the outcome of the workshop.

Analysis & Visualization Side Channel

Yarden Livnat from the University of Utah is here.

He is interested in ***YOUR*** analysis and visualizations use cases and needs.

Please take a moment at some point in the next two days to sit down with him and demonstrate and discuss your simulator’s capabilities.

His talk is next!

Tracks

- General
- Model Development & Fidelity
- Fuel Cycle Scenarios
- Validation, Verification, and Uncertainty Quantification

Purpose Statement

During the Technical Workshop on Fuel Cycle Simulators we seek to actively discuss the challenges faced by contemporary fuel cycle simulation. Through this discussion, we seek to establish an understanding of common needs and propose potential mechanisms to address those needs. This includes - but is not limited to - model development, scenario development, analysis & visualization, and validation issues.