

SUBJECT: Report on Foreign Travel to Virtual meeting WPNCS SG11 in Paris, FR

DATE: October 28, 2022

TO: Dr. Angela Chambers, Nuclear Criticality Safety Program Manager, National Nuclear

Security Administration / NA-511

FROM: Michael Rising, Los Alamos National Laboratory

MEETING TITLE: 2nd Meeting of the Working Party on Nuclear Criticality Safety Subgroup 11 on Bias and

Correlated Data

MEETING LOCATION: Hybrid (virtual and in-person) from Paris, France

MEETING DATES: Thursday, June 30, 2022 1:00 am - 5:00 am Mountain Time (9:00 am - 1:00 pm CEST)

ATTENDEES ON BEHALF OF NCSP: Michael Rising, Bobbi Riedel

MEETING PURPOSE: The purpose of the meeting is to discuss and develop novel techniques to account for bias and correlations in experimental benchmarks and effects. Work is aimed at improving analytical methods that support nuclear criticality safety work including MCNP® and sensitivity/uncertainty tools such as Whisper.

MEETING BENEFITS TO THE NCSP: Contributors and participants in multiple subgroups aimed at providing and comparing state-of-the-art information for improving MCNP®, Whisper, and other computational methods that are necessary and heavily used in NCSP work. Ongoing subgroups include: benchmark quality assessments and metrics, computational bias methods and comparisons, and benchmark correlation calculational methods

PURPOSE OF TRAVEL

Not applicable. Participants joined the meeting virtually using Zoom from their offices.

Persons Contacted during virtual meeting

A list of speakers during the virtual meeting is shown below:



Time (CEST)	Topic	Speaker
09:00	Opening session	эрсикст
09:00	Welcome, opening remarks	A. Hoefer (coordinator)
09:05	Self-introduction of participants	Participants
09:15	Administrative items	
09:15	Adoption of the agenda	JF. Martin (NEA Secretariat)
09:20	Approval of the summary record of previous meeting	JF. Martin (NEA Secretariat)
09:25	Review of actions from the previous meeting	A. Hoefer (coordinator)
09:30	Presentations of the participants	
09:30	Exercise definition	A. Hoefer (coordinator)
09:40	UPM contribution to WPNCS SG11 "Bias and correlated data"	O. Cabellos (SPN)
09:55	Impact of experimental correlation factors on bias estimation with MACSENS GLLSM tool	F. Fernex (FR)
10:10	Deterministic and Monte Carlo Nuclear Data Adjustment Methods	M. Rising (US)
10:25	Group picture & Coffee break (25')	
10:50	Presentations of the participants (ctd)	
10:50	Bayesian updating for variance reduction	P. Smith (UK)
11:05	On the PSI SG11 results	A. Vasiliev (CH)
11:20	Purdue University/ORNL results	H. Abdel-Khalik (US)
11:35	Progress on the SG11 activities	
11:35	Summary of Submitted Results	A. Hoefer (coordinator)
11:55	Open discussion about results and lessons learnt	Participants
12:20	Preparation of the report and outlook	A. Hoefer (coordinator)
12:40	Closing session	
12:40	Date and place of next meeting(s)	A. Hoefer (coordinator)
12:45	Any other business	Participants
12:50	Review of actions	A. Hoefer (coordinator)
12:55	Closing remarks	A. Hoefer (coordinator)
13:00	Adjourn	

Presentations, Chair Responsibilities, Etc.:

M. Rising presented Deterministic and Monte Carlo Nuclear Data Adjustment Methods during meeting

Distribution:

Angela Chambers, <u>angela.chambers@nnsa.doe.gov</u>
Doug Bowen, <u>bowendg@ornl.gov</u>
Marsha Henley, <u>henleym@ornl.gov</u>