

2025 SCALE Users' Group Workshop

June 2–6, 2025

Presented Virtually from Oak Ridge National Laboratory via Microsoft Teams

Agenda as of 5/1/2025

Event contact	Germina Procop procopg@ornl.gov Lisa Fassino reedke@ornl.gov Will Wieselquist wieselquiswa@ornl.gov	
Monday, June 2, 2025, 8:00 am–1:00 pm (Eastern Daylight Time)		
Event/Time	Moderator/Presenter	
Tutorial Session (8:00–8:55 am) Frequent Fulcrum Functions: The Basics of SCALE's Graphical User Interface	Rob Lefebvre (ORNL) Steve Skutnik (ORNL)	
Tutorial Session (9:00–9:55 am) SCALE Utilities for Nuclear Data Interrogation, Comparison, and Visualization	Jesse Brown (ORNL) Jordan McDonnell (ORNL)	
Tutorial Session (10:00–10:55 am) Fulcrum Data and Geometry Visualization	Rob Lefebvre (ORNL) Steve Skutnik (ORNL)	
Introductions/Welcome (11:00–11:05 am)		
Technical Session (11:05 am–1:00 pm) <u>Special Session - Invited SCALE Users Talks</u> TBD	Ondrej Chvala (University of Texas, Austin) Ben Lindley (University of Wisconsin, Madison) Ahmed Shama (ORNL)	
Tuesday, June 3, 2025, 8:00 am–1:00 pm (Eastern Daylight Time)		
Event/Time	Moderator/Presenter	
Tutorial Session (8:00–8:55 am) Activation Analysis with ORIGEN/MAVRIC for Advanced Reactors	Cihangir Celik (ORNL) Steve Skutnik (ORNL)	

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Event/Time	Moderator/Presenter
Tutorial Session (9:00–9:55 am) Molten Salt Reactor Analysis with SCALE	Donny Hartanto (ORNL) Rike Bostelmann (ORNL)
Tutorial Session (10:00–10:55 am) MAVRIC Long-Distance Statistics for Activation	Cihangir Celik (ORNL) TBD
Technical Session (11:00 am–1:00 pm) <u>SCALE Open Mic</u> TBD	TBD
Wednesday, June 4, 2025, 8:00 am–1:00 pm (Eastern Daylight Time)	
Event/Time	Moderator/Presenter
Tutorial Session (8:00–8:55 am) SCALE Sensitivity	Jordan McDonnell (ORNL) Alex Shaw (ORNL)
Tutorial Session (9:00–9:55 am) New Sensitivity Features and More in Sampler	Ugur Mertuyurek (ORNL) Rike Bostelmann (ORNL)
Tutorial Session (10:00–10:55 am) New Sensitivity Capability in ORIGEN	BK Jeon (ORNL) Yves Robert (ORNL)
Technical Session (11:00 am–1:00 pm) <u>Best SCALE Model Contest</u> TBD	TBD
Thursday, June 5, 2025, 8:00 am–1:00 pm (Eastern Daylight Time)	
Event /Time	Moderator/Presenter
Tutorial Session (8:00–8:55 am) Modeling of TRISO Fuel with SCALE	Rike Bostelmann(ORNL) Donny Hartanto (ORNL)
Tutorial Session (9:00–9:55 am) VADER for Criticality Safety Validation	Lisa Fassino (ORNL) Alex Shaw (ORNL)

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Event /Time	Moderator/Presenter
Tutorial Session (10:00–10:55 am) Accessible Data Files in SCALE and How to Use Them: II.JSON and CSV	Steve Skutnik (ORNL) TBD
Technical Session (11:00 am–1:00 pm) <u>Sneak Peek at Upcoming Features in SCALE 7.0</u> - Automation Framework for Nuclear Data Libraries - Polaris Advancements in SCALE 7.0 - New Coverage Metric for Bias and Uncertainty, Gap Analysis, and Experiment Design - Advancements in Monte Carlo Transport with Shift - New in ORIGAMI for Advanced Reactors - Fulcrum Enhancements	Jessee Brown (ORNL) Matthew Jessee (ORNL) Ugur Mertuyurek (ORNL) Kursat Bekar (ORNL) Steve Skutnik (ORNL) Steve Skutnik (ORNL)
Friday, June 6, 2025, 8:00 am–1:00 pm (Eastern Daylight Time)	
Event /Time	Moderator/Presenter
Tutorial Session (8:00–8:55 am) SCALE Modelling & Simulations for Nuclide Inventories and Source Terms in Spent Nuclear Fuel	Germina Procop (ORNL) Yves Robert (ORNL)
Tutorial Session (9:00–9:55 am) ORIGEN Library Generation with TRITON	Steve Skutnik (ORNL) TBD
Tutorial Session (10:00–10:55 am) LWR Decay Heat Analysis with SCALE	Germina Procop (ORNL) BK Jeon (ORNL)

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Event /Time	Moderator/Presenter
Technical Session (11:00 am–1:00 pm) <u>SCALE Team Highlights</u> • Updates in SCALE 6.3.3 • SCALE 6.3 Validation: ◦ Nuclear Criticality Safety ◦ Radiation Shielding ◦ Reactor Physics ◦ Spent Nuclear Fuel • The DOE/NRC Criticality Safety for Commercial-Scale High-Assay Low-Enriched Uranium (HALEU) for Fuel Cycle and Transportation (DNCSH) Benchmarks • High Burnup and Extended Enrichment Validation Studies • TRISO-Fueled HPR Analysis and TRITON Updates • Non-LWR Nuclide Importance to: ◦ Decay Heat Analysis ◦ Criticality Safety ◦ Radiation Shielding	Rob Lefebvre (ORNL) Travis Greene (ORNL) Arzu Alpan (ORNL) Kang Seog Kim (ORNL) Germina Procop (ORNL) Mathieu Dupont (ORNL) Walid Metwally (ORNL) Donny Hartanto (ORNL) Yves Robert (ORNL) Alex Shaw (ORNL) Georgeta Radulescu (ORNL)