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- 1156 Small Sample Reactivity Worth Calculation: Comparison of Serpent2 and TRIPOLI4 Perturbation Techniques—*Federico Di Croce (SCK CEN), Pierre Leconte (CEA), Federico Grimaldi (SCK CEN), Antonin Krása (SCK CEN), Pierre-Etienne Labeau (Université Libre de Bruxelles), Jan Wagemans (SCK CEN)*
- 1166 Revisiting the Reactor Period Capabilities in TRIPOLI-4®—*Cecilia Montecchio (CEA), Davide Mancusi (CEA), Vincent Lamirand (École Polytechnique Fédérale de Lausanne), Wilfried Monange (IRSN), Andrea Zoia (CEA)*
- 1176 Multi Cycle Core Follow Calculations for Hanbit Unit 3 Using the McCARD/MASTER Code System with ENDF/B-VII.1 and ENDF/B-VIII.0 Evaluated Nuclear Data Libraries—*Jeong Woo Park (Kyung Hee Univ.), Ho Jin Park (Kyung Hee Univ.)*
- 1187 Monte Carlo Methods**
- 1188 Fourier Analysis of Fission Matrix Convergence Acceleration—*Paul Cosgrove (Univ. Cambridge), Zi Liang Tan (SNRSI)*
- 1198 A Monte Carlo Implementation of the ζ -Eigenvalue Equation—*Valeria Raffuzzi (Univ. Cambridge), Nicolò Abrate (Politecnico di Torino), Sandra Dulla (Politecnico di Torino)*
- 1208 A Residual Monte Carlo Algorithm for Continuous Energy Neutron Transport with Elastic Scattering and Fission—*Massimo Larsen (Oregon State), Simon Bolding (LANL), Todd Palmer (Oregon State), Jim Morel (TAMU)*
- 1218 A Thick-Target Bremsstrahlung Model with Angularly-Dependent Emission in the MCNP6 Code—*Aaron G. Tumalak (LANL), Simon R. Bolding (LANL), Jesse F. Giron (LANL), Anthony Zukaitis (LANL)*
- 1229 Multi-Scale, Multi-Physics Simulations**
- 1231 Multi-Scale, Multi-Physics Simulations: I**
- 1232 Time-Dependent Power Reconstruction Methodology Using Interpolated Fractions and Peaking Factors in the Mixcoatl 2.0 Software—*Vincent Laboure (BWX Technologies), Chase Lawing (BWX Technologies), Phil Hegedus (BWX Technologies), Bryan Zilka (BWX Technologies)*
- 1241 Solving Point Kinetics Equations Using Matrix Exponentials and Reactivity Extrapolation—*Emmanuel Lefevre (TechnicAtome), Mael Akouz (TechnicAtome)*
- 1251 Application of the Pathline Method to the Aircraft Reactor Experiment—*Mathis Caprais (CEA), Nathan Greiner (CEA), André Bergeron (CEA)*
- 1261 The Parareal Algorithm as Applied to Coupled Point Kinetics and Thermal-Hydraulics Models for Reactor Transients—*Timothy M. Kiefer (NCSU), Nick J. Adamowicz (Bettis Atomic Power Lab), Gabriel Kooreman (Bettis Atomic Power Lab)*
- 1271 Multi-Scale, Multi-Physics Simulations: II**
- 1272 Coupling of Serpent, SUBCHANFLOW and SuperFINIX for Transient Simulations—*Riku Tuominen (VTT Technical Research Centre of Finland), Ville Valtavirta (VTT Technical Research Centre of Finland)*

- 1281 Coupled Neutronics and Thermal Hydraulics Simulations of a BWR Fuel Channel in the Version5 Environment—*Raphael Guasch (Polytechnique Montréal), Clément Huet (Polytechnique Montréal), Alain Hébert (Polytechnique Montréal), Cédric Béguin (Polytechnique Montréal), Guy Marleau (Polytechnique Montréal)*
- 1291 Application of Expanded Transfer Functions for Predicting Two-Group Macroscopic Cross Sections in a 3D Nuclear Thermal Propulsion Core—*Bailey Painter (Georgia Tech), Dan Kotlyar (Georgia Tech)*
- 1301 Serpent - BISON - THM Preliminary Multiphysics Modeling of a Nuclear Thermal Propulsion System Fuel Assembly—*Isaac Naupa (INL), Stefano Terlizzi (Penn State), Mark DeHart (INL)*
- 1311 Multi-Scale, Multi-Physics Simulations: III**
- 1312 Verification of a Multiphysics Gas-Cooled Reactor Simulation via the Method of Manufactured Solutions—*Zane G. Tucker (Oregon State), Todd S. Palmer (Oregon State)*
- 1322 Pebbles' Life Cycle Analysis in Salt-Cooled Pebble Bed Reactor for Enhanced Fuel Performance Assessment—*Ludovic Jantzen (Univ. California, Berkeley), Yves Robert (Univ. California, Berkeley), Massimiliano Fratoni (Univ. California, Berkeley)*
- 1332 In-Memory, Fully-Parallel Coupling of GeN-Foam and OFFBEAT: Towards a New Milestone in High-Fidelity, Finite-Volume Nuclear Reactor Simulation—*Giovanni Nervi (École Polytechnique Fédérale de Lausanne), Alessandro Scolaro (Ecole Polytechnique Federale de Lausanne), Thomas Guilbaud (Ecole Polytechnique Federale de Lausanne), Carlo Fiorina (TAMU), Mathieu Hursin (Ecole Polytechnique Federale de Lausanne)*
- 1342 Cell-Wise Temperature and Deformation Reactivity Feedback Modeling in Heat Pipe-Cooled Microreactors—*Chiara Genoni (TAMU), Carlo Fiorina (TAMU), Vefa Kucukboyaci (Westinghouse Electric Co.), Fausto Franceschini (Westinghouse Mangiarotti), Alessandro Scolaro (École Polytechnique Fédérale de Lausanne)*
- 1353 Multi-Scale, Multi-Physics Simulations: IV**
- 1354 Modelling of a Neutron Source Test Bed for the Fusion Fuel Cycle—*Mark R. Gilbert (U.K. Atomic Energy Authority), David Foster (U.K. Atomic Energy Authority), Steven C. Bradnam (U.K. Atomic Energy Authority), Andrew Davis (U.K. Atomic Energy Authority), Vladimir Martis (U.K. Atomic Energy Authority), Mikhail Yu. Lavrentiev (U.K. Atomic Energy Authority)*
- 1364 Method of Eigenfunction Expansion Applied to Laplace's Equation in Problems Consisting of Multilayer Concentric Spheres—*Dean Price (INL)*
- 1374 Monte Carlo Multiphysics on Moving Meshes: Initial Verification and Case Studies—*Mahmoud Eltawila (Univ. Illinois, Urbana-Champaign), April J. Novak (Univ. Illinois, Urbana-Champaign), Pierre-Clement A. Simon (INL), Guillaume Giudicelli (INL)*
- 1384 MOOSE Web Server Interface: A Message-Based External Interface for Multiphysics Simulations—*Logan Harbour (INL), Patrick Shriwise (ANL), April Novak (Univ. Illinois, Urbana-Champaign), Derek Gaston (INL)*
- 1395 Nuclear Data and Nuclear Data Evaluations**
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- 1397 Nuclear Data and Nuclear Data Evaluations: I**
- 1398 Machine Learning Applied to the Prediction of (n, 2n) Cross Sections—*L. Morgan (AWE), A. Stott (AWE), S. Sullivan (University of Surrey)*
- 1408 The Influence of Parent Feeding on Delayed-Neutron Group Parameter Estimation from Weighted Nonlinear Least-Squares Regressions—*Yanuar Ady Setiawan (Ulsan Nat'l Institute Science and Technology), Douglas A. Fynan (Ulsan Nat'l Institute Science and Technology)*
- 1418 Predicting (n,p) and (n, α) Cross Sections Using Decision Trees—*Rohan Gaya (Univ. Cambridge), Valeria Raffuzzi (Univ. Cambridge), Eugene Shwageraus (Univ. Cambridge), Lee Morgan (AWE)*
- 1427 Development of a Representative Molten Chloride Fast Reactor Model to Assess the Impact of Nuclear Data—*Rakim Hirji (Georgia Tech), Germina Procop (ORNL), Friederike Bostelmann (ORNL), Rabab Elzohery (ORNL)*
- 1437 Nuclear Data and Nuclear Data Evaluations: II**
- 1438 Numerical Solutions of the Inventory Equation and Graph Theory—*David Foster (U.K. Atomic Energy Authority)*
- 1445 Linearized Thermal Incoherent Inelastic Neutron Scattering Sampling Distributions in the Direct $S(\alpha, \beta)$ Method—*Camden E. Blake (Rensselaer Polytechnic Institute), Wei Ji (Rensselaer Polytechnic Institute)*
- 1455 Implementation of Windowed Multipole Cross Section Capability into MCNP6.3—*Matthew Lazaric (Univ. New Mexico), Christopher Perfetti (Univ. New Mexico), Michael E. Rising (LANL)*
- 1464 AAA for Multipole Cross-Section Fitting—*Gavin Ridley (Aalo Atomics), Benoit Forget (MIT)*

1474 Performance VS Portability

1475 Radiative Transfer Methods

1477 Radiative Transfer Methods: I

- 1478 Accurate Reduced Floating-Point Precision Implicit Monte Carlo—*Simon Butson (Oregon State), Mathew Cleveland (LANL), Alex Long (LANL), Todd Palmer (Oregon State)*
- 1488 Reduced Memory Discretization Scheme for Time-Dependent Thermal Radiative Transfer Problems—*Rylan C. Paye (NCSU), Joseph M. Coale (LANL), James S. Warsa (LANL), Dmitry Y. Anistratov (NCSU), Connor A. Woodsford (LANL), Jim E. Morel (TAMU)*
- 1496 Implicit Opacities in Thermal Radiative Transfer—*Samuel Olivier (LANL), Quincy A. Huhn (TAMU), James S. Warsa (LANL)*
- 1506 Deterministic Particle Transport for Reducing Noise in Thermal Radiative Transfer—*Benjamin L. Estrada (Oregon State), Todd S. Palmer (Oregon State), Nicholas A. Gentile (LLNL)*

1517 Radiative Transfer Methods: II

- 1518 A Hybrid Second Moment Method for Thermal Radiative Transfer—*Michael Pozulp (LLNL), Terry Haut (LLNL), Patrick Brantley (LLNL), Samuel Olivier (LANL), Jasmina Vujic (Univ. California, Berkeley)*
- 1528 A Second Moment Transport Method for Semi-Implicit Nonlinear Thermal Radiative Transfer—*Joseph M. Coale (LANL), James S. Warsa (LANL), Samuel Olivier (LANL), Dmitry Y. Anistratov (NCSU), Jim E. Morel (TAMU)*
- 1538 Generalized Non-Equilibrium Marshak Wave Solutions in the Gray Diffusion Approximation—*Menahem Krief (Racah Institute), Ryan G. McClarren (Univ. Notre Dame)*
- 1547 Multilevel Method with Low-Order Equations of Mixed Types and Two Grids in Photon Energy for Thermal Radiative Transfer—*Dmitriy Y. Anistratov (NCSU), Terry S. Haut (LLNL)*

1557 Sensitivity Analysis and Uncertainty Quantification

1559 Sensitivity Analysis and Uncertainty Quantification: I

- 1560 Fully Coupled Adjoint-Based Perturbation Theory for dynAmlcs and heat traNsfer (CAPTAIN) Multiphysics for Nuclear Transients—*Alexis Maldonado (Univ. New Mexico), Christopher M. Perfetti (Univ. New Mexico)*

- 1570 Uncertainty Quantification of Bifurcations in the Rayleigh-Benard Problem for Molten Salts—*Fadel M. Nasr (NCSU), Yousry Azmy (NCSU)*

- 1580 Uncertainty Quantification of Transients with Derived Kinetic Data—*Maximiliano Velasco (NCSU), Scott Palmtag (NCSU)*

1591 Sensitivity Analysis and Uncertainty Quantification: II

- 1592 Application of Fuel Depletion Chain Simplification to Experiment Analysis in the Advanced Test Reactor—*Travis J. Labossiere-Hickman (INL), Olin W. Calvin (INL)*
- 1602 Uncertainty Quantification for Watts Bar 1 PWR Using High-Fidelity Whole Core Model in WIMS® and the Latin Hypercube Sampling Method—*Jean Lavarenne (Amentum), Tim Ware (Amentum), Magda Stefanowska-Skrodzka (Amentum), Kornelia Wolodzko (Amentum), William Poole (Amentum), Peter Smith (Amentum), Glynn Hosking (Amentum), Brendan Tollit (Amentum)*
- 1612 Uncertainty Quantification Of Fuel Assembly Bow In Pressurized Water Reactor Through a Thermomechanical Simulation—*Ali Abboud (CEA), Josselin Garnier (École Polytechnique Fédérale de Lausanne), Bertrand Leturcq (CEA), Julien Pacull (Framatome), Olivier Fandeur (CEA), Stanislas de Lambert (CEA)*
- 1622 Analytic Sensitivity Coefficients for Bethe's Solution of the Neutron Slowing Down Equation—*Colin A. Weaver (LANL), Michael E. Rising (LANL), Joel A. Kulesza (LANL), Pablo A. Vaquer (LANL)*

1635 Sensitivity Analysis and Uncertainty Quantification: III

- 1636 Nuclear Data Impact on HTR-10 Pebble Bed Reactor Metrics—*Rabab Elzohery (ORNL), Friederike Bostelmann (ORNL), Germina Procop (ORNL)*
- 1646 Identifying Nuclear Data Uncertainties to the Integral keff in the MCFR-D Reactor—*Bobbi Harper (TerraPower), Tommy Cisneros (TerraPower)*
- 1656 Cross Section Discrepancies in Neutron-Carbon Interactions at 14 MeV: A Sensitivity and Uncertainty Analysis—*Enrica Belfiore (CEA), Mehdi Ben Mosbah (CEA), Rodolphe Antoni (CEA)*

1665 Sensitivity Analysis and Uncertainty Quantification: IV

- 1666 Eigenvalue Sensitivity to Problem Geometry by Coordinate Perturbation for Diffusion Equation—*Mikolaj Adam Kowalski (CEA), Anuj Dubey (Univ. Cambridge), Eugene Shwageraus (Univ. Cambridge)*

- 1676 Preliminary Results on Bayesian Inverse UQ for OECD/NEA WPNCs Subgroup 14 Benchmark Exercise for Error Recovery and Experimental Coverage—*Christopher Brady (NCSU), Sofiia Asadchykh (NCSU), Ziyu Xie (NCSU), Xu Wu (NCSU)*
- 1686 Exploring A Two-Level, Control-Variate Monte Carlo Method for Uncertainty Quantification in Criticality Safety—*Rabab Elzohery (ORNL), Jeremy Roberts (Kansas State)*
- 1696 Advancing Uncertainty Reduction -- Applications for ACCRUE Relevance Index in Nuclear Criticality Safety—*Jeongwon Seo (Univ. Texas, Austin), Ugur Mertuyrek (ORNL), Kevin T. Clarno (Univ. Texas, Austin)*
- 1707 Sensitivity Analysis and Uncertainty Quantification: V**
- 1708 A Low-Fidelity Covariance Library in EPICS for Photon-Electron Radiation Transport Applications—*Mekiel Olguin (Sandia), Christopher M. Perfetti (Univ. New Mexico), Aaron J. Olson (Sandia), Brian C. Franke (Sandia)*
- 1717 Preliminary Verification of Fixed-Source Sensitivity and Uncertainty Analysis in OpenMC—*Bamidele Ebiwonjumi (MIT), Benoit Forget (MIT), Ethan Peterson (MIT)*
- 1726 CWENO Interpolation for Non-Oscillatory Stochastic Collocation in Uncertainty Quantification Problems—*Alina Chertock (NCSU), Arsen S. Iskhakov (Kansas State), Anna Iskhakova (Kansas State), Alexander Kurganov (Southern Univ., China)*
- 1736 Advancing the STS Neutron Moderator Optimization with an Automated Workflow and Unstructured Mesh Modeling—*Kristel Ghoo (ORNL), Lukas Zavorka (ORNL), Igor Remec (ORNL)*

1747 Special Sessions

1749 Special Session on Adjoint Methods

- 1750 On the Applicability of Generalized Perturbation Theory for Enforcing Numerical Accuracy Enhancements in Embedded Search Procedures—*Rene van Geemert (Framatome)*
- 1761 Adjoint Sensitivity Analysis of a 1D Stationary Neutronics-Thermohydraulics Coupled Molten Salt Reactor Model—*Ruggero Rosselli (CEA), Grégoire Allaire (École Polytechnique), Cyril Patricot (CEA), Maria Adela Puscas (CEA), François Madiot (CEA), Nathan Greiner (CEA)*
- 1771 Efficient Neutron Detector Response Modeling for Non-Stationary Volumetric Sources Using Adjoint Methods—*Jason Rodriguez (TAMU), Jean C. Ragusa (TAMU)*

1781 Special Session on GPU Computing

- 1782 Implementation of the Multigroup Neutron Diffusion Equation Using Tensor Formulations in PyTorch—*Kajetan Streciwilk (Amentum), Brendan Tollit (Amentum), Paul Smith (Amentum), Simon Cox (Amentum), Boyang Chen (Imperial College London), Christopher C. Pain (Imperial College London)*
- 1792 Progress Porting LLNL Monte Carlo Transport Codes to the AMD Instinct MI300A APU—*Shawn A. Dawson (LLNL), Ryan C. Bleile (LLNL), Patrick S. Brantley (LLNL), Evan S. Gonzalez (LLNL), M. Scott McKinley (LLNL), Matthew J. O'Brien (LLNL), Mike M. Pozulp (LLNL), Alex P. Robinson (LLNL), Max Yang (LLNL)*
- 1802 Implementation and Performance Analysis of the Transient Solver in STREAM3D-GPU—*Saisundar Mohanty (Ulsan Nat'l Institute Science and Technology), Sierhei Dzianisau (Ulsan Nat'l Institute Science and Technology), Murat Serder Aygul (Ulsan Nat'l Institute Science and Technology), Deokjung Lee (Ulsan Nat'l Institute Science and Technology)*
- 1811 Performance Evaluation of GREAPMC for Continuous Energy Reactor Physics Problems—*Muhammad Rizwan Ali (Ulsan Nat'l Institute Science and Technology), Murat Serdar Aygul (Ulsan Nat'l Institute Science and Technology), Deokjung Lee (Ulsan Nat'l Institute Science and Technology)*

1821 Special Session on Random Ray Transport

- 1822 Linear Source Random Ray on GPU—*Rufus Neame (Univ. Cambridge), Paul Cosgrove (Univ. Cambridge), John Tramm (ANL)*
- 1832 Correcting k-eff-Normalisation-Induced Bias in the Time-Dependent Random Ray Method—*Maximilian Kraus (Univ. Cambridge), Paul Cosgrove (Univ. Cambridge), John Tramm (ANL), Eugene Shwageraus (Univ. Cambridge)*
- 1842 Coupled 1D Neutronics and Thermal-Hydraulics Modelling with the Random Ray Method—*Lucy Bland (Univ. Cambridge), Paul Cosgrove (Univ. Cambridge)*
- 1851 Randomized Quasi-Monte Carlo Sampling in the Random Ray Method for Neutron Transport Simulations—*Samuel Pasmann (Thea Energy), John Tramm (ANL)*

1859 Special Session on Research Activities of the Center for Exascale Monte Carlo Neutron Transport (CEMeNT)

1860 Opening Remarks

- 1861 Hybrid Weight Window Techniques for Time-Dependent Monte Carlo Neutronics—*Caleb Shaw (NCSU), Dmitriy Anistratov (NCSU)*
- 1871 Convergence of Multi-Level Hybrid Monte Carlo Methods for 1-D Particle Transport Problems—*Vincent N. Novellino (NCSU), Dmitriy Y. Anistratov (NCSU)*

1881 Post-Processing Results From a Monte Carlo Neutron Transport Code Using Compressed Sensing—*Ethan Lame (Oregon State), Camille Palmer (Oregon State), Todd Palmer (Oregon State), Ilham Variansyah (Oregon State), Ryan McClarren (Univ. Notre Dame)*

1891 Special Session on Stochastic Geometry and Particle Branching Processes: I

1892 A Batch Power Iteration Approach for the Iterative Quasi-Monte Carlo Method Using a Randomized-Halton Sequence—*Samuel Pasmann (Thea Energy), Ilham Variansyah (Oregon State), C.T. Kelley (NCSU), Ryan G. McClarren (Univ. Notre Dame)*

1901 Monte Carlo Uncertainty Quantification and Sensitivity Analysis for the C5G7 Benchmark—*Kayla B. Clements (Oregon State), Todd S. Palmer (Oregon State), Aaron J. Olson (Sandia), Gianluca Geraci (Sandia), Ilham Variansyah (Oregon State)*

1911 Derivative Source Method for Monte Carlo Transport Calculation of Sensitivities to Material Densities and Dimensions—*Ilham Variansyah (Oregon State), Ryan G. McClarren (Univ. Notre Dame), Todd S. Palmer (Oregon State)*

1922 Implicit Collision Multiplicity Adjustment for Efficient Monte Carlo Transport Simulation of Reactivity Excursion—*Ilham Variansyah (Oregon State), Ryan G. McClarren (Univ. Notre Dame), Todd S. Palmer (Oregon State)*

1933 Special Session on Research Activities of the Center for Exascale Monte Carlo Neutron Transport (CEMeNT): III

1934 Enabling GPU Portability into the Numba-JITed Monte Carlo Particle Transport Code MC/DC—*Joanna Piper Morgan (Oregon State), Braxton Cuneo (Seattle Univ.), Ilham Variansyah (Oregon State), Kyle E. Niemeyer (Oregon State)*

1944 Comparing the Performance of MC/DC's on-GPU Event-Based Processing Methods in Multigroup and Continuous-Energy Problems—*Braxton Cuneo (CEMeNT), Joanna Piper Morgan (CEMeNT), Ilham Variansyah (CEMeNT), Kyle E. Niemeyer (CEMeNT)*

1954 Improvements in MC/DC Domain Decomposition Functionality—*Alexander Mote (Oregon State), Todd Palmer (Oregon State), Lizhong Chen (Oregon State)*

1963 Special Session on Stochastic Geometry and Particle Branching Processes

1965 Special Session on Stochastic Geometry and Particle Branching Processes: I

1966 A Hierarchy of Parallel-Robust Stochastic Media Radiation Transport Models—*Aaron Olson (Sandia), Luke Kersting (Sandia), Kerry Bossler (Sandia), Revolution Rivera-Felix (Sandia)*

1976 Advances in Stochastic Geometry Modelling in MONK and MCBEND, the Importance of Stochastic Models, and an Approach to Validation—*Simon D. Richards (Amentum), Jessica A. Fildes (Amentum), Richard P. Hiles (Amentum), Brian J. Jones (Amentum), Paul N. Smith (Amentum)*

1986 Three-Point Correlations in Poisson Media—*Alec Shelley (Stanford), Aaron Olson (Sandia), Gianluca Geraci (Sandia)*

1996 The Stochastic Point Reactor Equation with Thermal Feedback—*Chen Dubi (Nuclear Research Center Negev), Anil K. Prinja (Univ. New Mexico)*

2007 Special Session on Stochastic Geometry and Particle Branching Processes: II

2008 Estimating the Ensemble-Average Effective Multiplication Factor and Neutron Scalar Flux Profile in Statistically Homogeneous Random Media Using a Nonclassical Model—*Leonardo Rodrigues da Costa Moraes (Universidade Estado Rio de Janeiro), Ricardo Carvalho de Barros (Universidade Estado Rio de Janeiro), Hermes Alves Filho (Universidade Estado Rio de Janeiro), Richard Vasques (Ohio State)*

2018 Random Media Criticality Analysis Using the Randomized Fourier Series for Arbitrary-Shaped Power Spectrum—*Taro Ueki (JAEA)*

2028 Subcriticality Estimation Without Point Kinetics Parameters Based on Autocovariance of Reactor Noise Using Delayed Neutron Components—*Tomohiro Endo (Nagoya Univ.), Ryoga Hirota (Nagoya Univ.), Akio Yamamoto (Nagoya Univ.), Kenichi Watanabe (Kyushu Univ.), Genichiro Wakabayashi (Kindai Univ.), Kengo Oda (Hokkaido Univ.), Junichi H. Kaneko (Hokkaido Univ.)*

2038 Reactivity Estimation in Dollar Units Based on Bayesian Monte Carlo Using Autocovariance of Reactor Noise Measurement—*Ryoga Hirota (Nagoya Univ.), Tomohiro Endo (Nagoya Univ.), Akio Yamamoto (Nagoya Univ.), Kenichi Watanabe (Kyushu Univ.), Genichiro Wakabayash (Kindai Univ.), Kengo Oda (Hokkaido Univ.), Junichi H. Kaneko (Hokkaido Univ.)*

2049 Special Session on Stochastic Geometry and Particle Branching Processes: III

- 2050 Effects of Models Used in Stochastic Fission Event Energy Deposition Distribution Simulations—*Patrick O'Rourke (LANL), Amy Lovell (LANL), Anil Prinja (Univ. New Mexico), Scott Ramsey (LANL)*
- 2060 Implicit Monte Carlo Thermal Radiative Transfer for Three-Dimensional Binary Stochastic Media: Markovian and Renewal Material Statistics—*Patrick S. Brantley (LLNL), Vincent N. Novellino (NCSU)*
- 2070 Monte Carlo Particle Transport in Renewal Statistical Media—*Dominic A. Lioce (Univ. California, Berkeley), Patrick S. Brantley (LLNL), Anil K. Prinja (Univ. New Mexico)*
- 2081 A Generalized Master Equation for Transport in Binary Random Media with Renewal Statistics—*Anil K. Prinja (Univ. New Mexico), Dominic A. Lioce (Univ. California, Berkeley)*

2091 Verification, Validation, and Benchmark Experiment Design

2093 Verification, Validation, and Benchmark Experiment Design: I

- 2094 Comparison of the ECCO/ERANOS and APOLLO3(r) Code for Molten Salt Fast Reactors Design Studies—*Dusan Marjanovic (CEA), Nicolin Garnier (CEA), Giorgio Valocchi (CEA), Jean Tommasi (CEA)*
- 2103 Modified Algorithm for Taking into Account Delayed Neutron Precursor Movement in the Improved Quasi-Static Scheme of the SIMMER-III Code—*Barbara Křdzierska (Karlsruhe Institute of Technology), Andrei Rineiski (Karlsruhe Institute of Technology), Yoshiharu Tobita (Karlsruhe Institute of Technology)*
- 2113 Graphite-Moderated Molten Salt Reactor Progression Problems—*Cole A. Gentry (Univ. Texas, Austin), Rok Krpan (TAMU), Kevin Clarno (Univ. Texas, Austin), Carlo Fiorina (TAMU), Jean Ragusa (TAMU), Benjamin Collins (Univ. Texas, Austin)*

- 2123 The Neutronics Codes FENNECS and FRENETIC: Code-to-code Benchmarking on Lead and Sodium-cooled Fast Reactors—*Nicolo' Abrate (Politecnico di Torino), Jeremy Bousquet (GRS), Sandra Dulla (Politecnico di Torino), Silvia Io Muzio (GRS), Armin Seubert (GRS), Christian Vita (Politecnico di Torino)*

2133 Verification, Validation, and Benchmark Experiment Design: II

- 2134 Single Grid Error Estimate in Two-Dimensional Neutron Transport Problems—*Ben Whewell (Univ. Notre Dame), Ryan G. McClarren (Univ. Notre Dame)*
- 2144 Verification Methods for the AGORA Geometry Navigation Engine of the TRIPOLI-5 Monte Carlo Code—*Coline Larmier (CEA), Davide Mancusi (CEA), Vincenzo di Blasi (CEA), Andrea Zoia (CEA)*
- 2154 Ants Solution to IAEA-Hex Kinetics Benchmark—*Antti Rintala (VTT Technical Research Centre of Finland)*
- 2163 Validation of OpenMC Using the KRUSTY Component Critical Experiments—*Michael Anthony Mendes (Univ. Illinois, Urbana-Champaign), April J. Novak (Univ. Illinois, Urbana-Champaign)*

2175 Verification, Validation, and Benchmark Experiment Design: III

- 2176 EDIM Local Power History and Burnup Inference Based on Destructive Assay Data—*Shiming Yin (Purdue Univ.), Tarikul Islam (Purdue Univ.), Ugur Mertuyurek (ORNL), Germina Procop (ORNL), Hany Abdel-Khalik (Purdue Univ.)*
- 2186 Activation Calculation Comparison for FISPACT-II, ORIGEN, and OpenMC—*Jin Whan Bae (ORNL), Yves Robert (ORNL)*
- 2196 Multi-Cycle Neutronics Verification in the Kraken Framework—*Ville Valtavirta (VTT Technical Research Centre of Finland)*
- 2206 Alpha Eigenvalue and Beta-Effective Calculations of High Multiplication Uranium Experiments—*William Zywiec (LLNL), Jesse Norris (LLNL), Samuel Varghese (LLNL), David Heinrichs (LLNL), Daniel Siefman (LLNL), Edward Lent (LLNL), Chuck Lee (LLNL), Anthony Nelson (LLNL)*