

# Oral Presentations

The name appeared in the following program is the first author of each paper.

Notifications on presenter is recorded by the organization committee and they are used to check the registration status of each paper.

## September 29 (Mon.) 13:00-15:30

### 1-1. Reactor Analysis Method (Mizuho\_A)

Session Chair : Tamer Bahadir(Studsvik Scandpower, Inc.), Masayuki Tojo(GNF-J)

13:00	Hitachi's Advanced Technologies	Hideo Soneda	Hitachi-GE Nuclear Energy, Ltd.	2000002
13:20	Development of Enhanced SPH Method for Pin-by-Pin Core Calculations	Satoshi Takeda	NUCLEAR FUEL INDUSTRIES, LTD	1103613
13:40	STUDY ON CROSS SECTION CORRECTION USING SPH METHOD FOR A WHOLE CORE MOC CALCULATION	Akinori Giho	Shikoku Electric Power Co., Inc.	1084323
14:00	ASYMPTOTIC, MULTIGROUP FLUX RECONSTRUCTION AND CONSISTENT DISCONTINUITY FACTORS	Travis John Trahan	Los Alamos National Laboratory	1106814
14:20	A POSTERIORI RECONSTRUCTION OF THE FLUX PROFILE IN THE CASE OF LOCALIZED AXIAL HETEROGENEITIES: AN APPLICATION TO THE MODELING OF PWR MIXING GRIDS	Enrico Girardi	Electricite de France - R&D	1101880
14:40	Effects of Advanced Radial Submeshing Methods on Pin Power Reconstruction for an EPR Core Design	Petra Mala	Paul Scherrer Institute	1105669
15:00	STUDY ON ROBUST ENERGY GROUP STRUCTURE TO SPECTRAL INTERFERENCE FOR PWR PIN-BY-PIN CORE ANALYSIS	Satoshi Wada	Osaka university	1105989

### SS2-1. Reactor Physics and Criticality Safety Activities in OECD/NEA Working Party (Mizuho\_B)

Session Chair : Mark DeHart(INL), Teruhiko Kugo(JAEA)

13:00	Activities of OECD/NEA on Scientific Issues of Reactor Systems and Critical Safety - Current Status and Future Plan	TBD	OECD/NEA	2000000
13:20	UNCERTAINTY ANALYSIS OF THE OECD/NRC OSKARSHAMN-2 BWR STABILITY BENCHMARK	Ivan Angelov Gajev	Royal Institute of Technology	1093239
13:40	ANALYSIS OF THE OECD/NEA OSKARSHAMN-2 FEEDWATER TRANSIENT AND STABILITY BENCHMARK WITH SIMULATE-3K	Abdelhamid Dokhane	Paul Scherrer Institute (PSI)	1101708
14:00	Data Assimilation for Kinetic Parameters Uncertainty Analysis	Evgeny Ivanov	Institut de Radioprotection et Surete Nucleaire	1105973
14:20	Criticality and Reactor Physics Benchmark Experiments: Influence of Nuclear Data Uncertainties	Winfried Zwermann	Gesellschaft fuer Anlagen- und Reaktorsicherheit (GRS) mbH	1103852
14:40	THE EVALUATION OF THE SUBCRITICAL EXPERIMENTS PERFORMED IN THE IPEN/MB-01 RESEARCH REACTOR FACILITY FOR THE IRPHE PROJECT	Adimir dos Santos	Instituto de Pesquisas Energeticas e Nucleares IPEN-CNEN/SP	1095691
15:00	POLARIS: A NEW TWO-DIMENSIONAL LATTICE PHYSICS ANALYSIS CAPABILITY FOR THE SCALE CODE SYSTEM	Matthew A Jessee	Oak Ridge National Laboratory	1127872

### SS1-1. Molten Salt Reactors (Hiei)

Session Chair : Imre Pázsit(Chalmers Univ. of Tech.), Ritsuo Yoshioka(International Thorium Molten-Salt Forum)

13:00	EXPERIMENTAL MODELLING AND NUMERICAL ANALYSIS OF A MOLTEN SALT FAST REACTOR	Bogdán Keisuke Yamaji	Institute of Nuclear Techniques, Budapest University of Technology and Economics	1106911
13:20	Remark on the propagating neutron noise in a MSR	Victor Dykin	Chalmers University of Technology	1127633
13:40	The two-group point-kinetic component of neutron noise in an MSR	Victor Dykin	Chalmers University of Technology	1105994
14:00	NEUTRONICS OF FLUID FUEL SYSTEM WITH PERFECT REMIXING	Sandra Dulla	Politecnico di Torino	1105851
14:20	An innovative approach to dynamics modeling and simulation of the Molten Salt Reactor Experiment	Matteo Zanetti	Politecnico di Milano, Department of Energy, Nuclear Engineering Division	1104090
14:40	SAFETY CRITERIA AND GUIDELINES FOR MSR ACCIDENT	Ritsuo Yoshioka	International Thorium Molten-Salt Forum	1081443
15:00	Reactivity-insertion-transient Analysis of a Fluoride Salt Cooled High Temperature Reactor	Yang Yang	Shanghai Institute of Applied Physics	1087405

### SS5. Multiscale, Multiphysics Approaches in Nuclear Science and Engineering Applications (Atago)

Session Chair : Richard Martineau(INL), Takeshi Mitsuyasu(Hitachi)

13:00	Influence of an SN solver in a fine-mesh neutronics/thermal-hydraulics framework	Klas Jareteg	Division of Nuclear Engineering, Department of Applied Physics, Chalmers University of Technology	1104064
13:20	High-Fidelity Multi-Physics Calculations for Light Water Reactors Using Coupled CTF/TORT-TD/FRAPTRAN	Jeffrey William Magedanz	The Pennsylvania State University	1106221
13:40	THE COUPLING OF THE NEUTRONIC TRANSPORT APPLICATION RATTLESNAKE TO THE NUCLEAR FUELS PERFORMANCE APPLICATION BISON UNDER THE MOOSE FRAMEWORK	Frederick N Gleicher	Idaho National Laboratory	1106401
14:00	A model of two-stage core calculation method coupled with subchannel analysis for boiling water reactors	Takeshi Mitsuyasu	Hitachi, Ltd.	1100830
14:20	SUBSPACE METHODS FOR MULTI-PHYSICS REDUCED ORDER MODELING IN NUCLEAR ENGINEERING APPLICATIONS	Bassam A. Khuwailah	Department of Nuclear Engineering North Carolina State University, Raleigh, NC, USA	1126241
14:40	Extension of the Entropy Viscosity Method to Flows with Friction Forces and Source Terms	Jean C Ragusa	Texas A&M University	1106855
15:00	EFFICIENT FINITE ELEMENT FIELD INTERPOLATION FOR MULTIPHYSICS APPLICATIONS	Jean C Ragusa	Texas A&M University	1106423

### 11-1. Research Reactors and Spallation Sources (Cosmos)

Session Chair : Ronald J. Ellis(ORNL), Gaillot Stephan(CEA)

13:00	An updated core design for the multi-purpose irradiation facility MYRRHA	Gert Van den Eynde	SCK-CEN	1104788
13:20	FEASIBILITY STUDY OF INSTALLING A THERMAL TO 14 MeV	Luka Snoj	Jozef Stefan Institute	1102618
13:40	Development and Validation of a New APOLLO2-Based Calculation Scheme Dedicated to Ex-Core Rod Irradiations in the OSIRIS MTR	Florent Chevallier	Alternative Energies and Atomic Energy Commission (CEA)	1106200
14:00	NEUTRONIC DESIGNS AND ANALYSES OF A NEW CORE-MODERATOR ASSEMBLY AND NEUTRON BEAM PORTS FOR THE PENN STATE BRFAZFAF REACTOR	Dundar Ucar	The Pennsylvania State University	1084741
14:20	Design Studies for a Multiple Application Thermal Reactor for Irradiation experiments (MATRIX)	Michael A Pope	Idaho National Laboratory	1085708

14:40	SIMULATED IRRADIATION OF SAMPLES IN HFIR FOR USE AS POSSIBLE TEST MATERIALS IN THE MPEX (MATERIAL PLASMA EXPOSURE EXPERIMENT) FACILITY	Ronald J. Ellis	Oak Ridge National Laboratory	1178823
15:00	MCNPX ANALYSIS OF DELAYED NEUTRON FRACTION IN BERYLLIUM REFLECTED CORES	SILVA KALCHEVA	SCK-CEN	1077740

## September 29 (Mon.) 15:45-18:15

### 1-2. Reactor Analysis Method (Mizuho\_A)

Session Chair : Richard Sanchez(CEA), Hideki Matsumoto(MHI)

15:45	APPLICATION OF THE EFFICIENT CONSISTENT SPATIAL HOMOGENIZATION METHOD IN NEUTRON TRANSPORT THEORY TO A GAS-COOLED THERMAL REACTOR PROBLEM	#REF!	Georgia Institute of Technology	1106236
16:05	APPLICATION OF THE HYBRID DIFFUSION-TRANSPORT SPATIAL HOMOGENIZATION METHOD TO A HIGH TEMPERATURE TEST REACTOR BENCHMARK PROBLEM	Gabriel Kooreman	Georgia Institute of Technology	1106275
16:25	NORMALIZATION METHODS FOR DIFFUSION CALCULATIONS WITH VARIOUS ASSEMBLY HOMOGENIZATIONS	Coline Brosselard	EDF R&D/SINETICS	1094770
16:45	ON THE PRACTICAL FEASIBILITY OF CONTINUOUS-ENERGY MONTE CARLO IN SPATIAL HOMOGENIZATION	Jaakko Leppanen	VTT Technical Research Centre of Finland	1103983
17:05	A Dynamic Homogenization Model for Pebble Bed Reactors	Maurice Grimod	CEA de Saclay	1105216
17:25	HOMOGENIZATION OF THE STEP CHARACTERISTIC SCHEME IN PHASE SPACE	Dmitriy Anistratov	North Carolina State University	1126229
17:45	Spatial Rehomoization of Cross Sections and Discontinuity Factors for Nodal Calculations	Aldo Dall'Osso	AREVA NP	1086844

### SS2-2. Reactor Physics and Criticality Safety Activities in OECD/NEA Working Party (Mizuho\_B)

Session Chair : Mark DeHart(INL), Teruhiko Kugo(JAEA)

15:45	EVALUATION OF LARGE 3600MWth SODIUM-COOLED FAST REACTOR OECD NEUTRONIC BENCHMARKS	#REF!	CEA	1103961
16:05	Evaluation of Medium 1000 MWth Sodium-cooled Fast Reactor OECD neutronic Benchmarks	Nicolas Emile Stauff	Argonne National Laboratory	1104111
16:25	SFR WHOLE CORE BURNUP CALCULATIONS WITH TRIPOLI-4 MONTE CARLO CODE	Yi-Kang Lee	CEA-Saclay	1106242
16:45	SUMMARY AND STATUS OF OECD/NEA UAM-LWR BENCHMARK	Maria Nikolova Avramova	The Pennsylvania State University	1104813
17:05	UNCERTAINTY AND SENSITIVITY ANALYSIS OF OECD/NEA UAM FUEL THERMAL BEHAVIOUR BENCHMARK USING A FALCON/IRANIE METHODOLOGY	Younsuk Yun	Paul Scherrer Institut	1105847
17:25	New PSI methodology for manufacturing and technological uncertainty quantification	Marco Pecchia	Paul Scherrer Institut (PSI)	1105694
17:45	RE-EVALUATION AND CONTINUED DEVELOPMENT OF SHIELDING BENCHMARK DATABASE SINBAD	Ivan Alexander Kodeli	Jozef Stefan Institute	1106058

### SS1-2. Molten Salt Reactors (Hiei)

Session Chair : Imre Pazsit(Chalmers Univ. of Tech.), Ritsuo Yoshioka(International Thorium Molten-Salt Forum)

15:45	HYBRID SPECTRUM MOLTEN SALT REACTOR	Jiri Krepel	PSI Switzerland	1102672
16:05	Thorium Conversion Optimization in Two-Fluid Molten-Salt Reactor	Jan Frybort	UJV Rez / Czech Technical University in Prague	1105569
16:25	Development of Computer Code Systems for Molten Salt Reactor Core Analysis	Yongjin Jeong	Ulsan National Institute of Science and Technology	1106010
16:45	Use of MCDancoff Factor Correction for Multi-group Fuel Depletion Analyses of Liquid Salt Cooled Reactors	Michael Huang	Georgia Institute of Technology	1106115
17:05	COMPARATIVE STUDIES ON PLUTONIUM AND 233U UTILIZATION IN MINIEWJ MSR	Abdul Waris	Bandung Institute of Technology	1108342
17:25	ON AN OPTIMIZED NEUTRON SHIELDING FOR AN ADVANCED MOLTEN SALT FAST REACTOR DESIGN	Bruno Merk	Helmholtz-Zentrum Dresden-Rossendorf e.V.	1105793

### SS7. Control Rod Withdrawal Tests Performed During the PHENIX End-of-Life Experiments (Atago)

Session Chair : Stefano Monti(IAEA), Shigeo Ohki(JAEA)

15:45	CEA CONTRIBUTION TO THE ANALYSIS OF THE CONTROL ROD WITHDRAWAL TEST PERFORMED DURING PHENIX END-OF-LIFE EXPERIMENTS (IAEA Common Research Program)	Vincent PASCAL	CEA, DEN, DER, SPRC/LEDC	1096440
16:05	IAEA Benchmark Calculations on Control Rod Withdrawal Test Results Performed During PHENIX End-of-Life Experiments - JAEA's Calculation Results	Kazuya Takano	Japan Atomic Energy Agency	1090681
16:25	BENCHMARK ANALYSIS OF PHENIX CONTROL ROD WITHDRAWAL END-OF-LIFE EXPERIMENTS	Devan Kunhiraman	Indira Gandhi Centre for Atomic Research	1102267
16:45	CALCULATION OF THE PHENIX END-OF-LIFE TEST "CONTROL ROD WITHDRAWAL" WITH THE FRANOS CODE	Evgeny Ivanov	Institut de Radioprotection et Surete Nucleaire	1104099
17:05	Simulation of PHENIX Control Rod Withdrawal Experiments with SIMMER-IV	Vladimir Kriventsev	Karlsruhe Institute of Technology (KIT)	1104108
17:25	STUDY OF THE EFFECT OF HETEROGENEITY OF THE CONTROL RODS IN THE PHENIX REACTOR	FABRIZIO GABRIELLI	Karlsruhe Institute of Technology (KIT), Institute for Nuclear and Energy	1106079
17:45	IAEA BENCHMARK CALCULATIONS ON CONTROL ROD WITHDRAWAL TEST PERFORMED DURING PHENIX END-OF-LIFE EXPERIMENTS - BENCHMARK RESULTS AND COMPARISONS	Vincent PASCAL	CEA, DEN, DER, SPRC/LEDC	1096461

### 11-2. Research Reactors and Spallation Sources (Cosmos)

Session Chair : Gert Van den Eynde(SCK/CEN), Cheolho Pyeon(KURRI)

15:45	A method for reactivity monitoring in subcritical source-driven systems	Sandra Dulla	POLITECNICO DI TORINO	1076430
16:05	INTERPRETATION OF EXPERIMENTAL MEASUREMENTS ON THE SC-1 CONFIGURATION OF THE VENUS-F CORE	Sandra Dulla	Politecnico di Torino	1107269
16:25	Neutronic Characteristics of Solid Targets in Accelerator-Driven System at Kyoto University Critical Assembly	Cheolho Pyeon	Kyoto University	1111120
16:45	EVALUATION OF NEUTRON SPECTRUM AT IN-CORE IRRADIATION EQUIPMENTS IN KUR WITH LOW ENRICHED URANIUM FUEL	Tadafumi Sano	Kyoto University Research Reactor Institute	1126220

17:05	ACCULACY OF THORIUM-LOADED ACCELERATOR-DRIVEN SYSTEM EXPERIMENTS AT KYOTO UNIVERSITY CRITICAL ASSEMBLY	Masao Yamanaka	Graduate school of Energy Science, Kyoto University	1090583
17:25	SHUTDOWN TRANSIENTS ANALYSIS FOR REFLECTOR DEVICES POWER CALCULATIONS IN JULES HOROWITZ MATERIAL TESTING REACTOR (IHR)	Patrizio Console Camprini	ENEA	1104755
17:45	Neutronic Analysis of the PULSTAR Reactor Using Monte Carlo Simulations	Ayman I. Hawari	North Carolina State University	1127882

## September 30 (Tue.) 8:00-10:05

### 1-3. Reactor Analysis Method (Mizuho\_A)

Session Chair : Han Gyu Joo(SNU), Wei Shen(CCSN)

8:00	Research Reactor In-Core Fuel Management Optimisation Using The Multiobjective Cross-Entropy Method	Evert B. Schlunz	South African Nuclear Energy Corporation SOC Ltd (Necsa)	1101850
8:20	Transient Cycle Fuel Management Optimization of a Pressurized Water Reactor	tongkyu park	FNC Technology Co., Ltd.	1105495
8:40	A MULTI-LEVEL PARALLEL COMPUTATION OF REACTOR CORES USING GPU FOR LOADING PATTERN OPTIMIZATION	Takuya Okubo	Nagoya University	1101184
9:00	Exact-to-Precision Generalized Perturbation Theory for Reactor Design Calculations	Congjian Wang	North Carolina State University	1127680
9:20	Depletion GPT-Free Sensitivity Analysis of the TMI Reactor Eigenvalue Model	Christopher Brandon Kennedy	North Carolina State University	1106622
9:40	The "Virtual Density" Theory of Neutronics: A Generic Method for Geometry Distortion Reactivity Coefficients	Mark Reed	TerraPower	1106665

### 5-1. Nuclear Criticality Safety (Mizuho\_B)

Session Chair : John Bess(INL), Toshihiro Yamamoto(KURRI)

8:00	NUCLEAR CRITICALITY SAFETY IN THE UNITED STATES: RECENT EVENTS, TRENDS AND A REVIEW OF THE SAFETY CULTURE	Matthew S Hodges	University of Nevada, Las Vegas (UNLV)	1105240
8:20	A NEW OECD/NEA DATABASE OF NUCLIDE COMPOSITIONS OF SPENT NUCLEAR FUEL	Franco Michel-Sendis	OECD Nuclear Energy Agency	1123747
8:40	OECD EGBUC Benchmark VIII ? Comparison of calculation codes and methods for the analysis of small-sample reactivity experiments	Pierre LECONTE	CEA Cadarache	1104030
9:00	Criticality Calculation of Fuel Debris in Fukushima Daiichi Nuclear Power Station	Akiyuki Tsuchiya	Hitachi-GE Nuclear Energy, Ltd.	1107488
9:20	Design of an efficient calculation model of BWR cold critical experiments for validation	Anssu Ranta-aho	Teollisuuden Voima Oyj	1106047
9:40	FIRST BURNUP CREDIT APPLICATION FOR TRANSPORT AND STORAGE CASK USING FRENCH EXPERIMENTS	Marcel TARDY	AREVA	1106235

### 2-1. Deterministic Transport Theory (Hiei)

Session Chair : Nam Zin Cho(KAIST), Masato Tabuchi(NEL)

8:00	A Collision Probability Based Method to Compute Cross Sections Sensitivities for the Subgroup Self-Shielding Technique	Maxime Dion	Ecole Polytechnique de Montreal	1080046
8:20	Improvement of a convergence technique for MOC calculation with large negative self-scattering cross section	Masato Tabuchi	Nuclear Engineering, Ltd.	1105664
8:40	Boundary Acceleration Techniques for CMFD-Accelerated 2D-MOC	Shane Gray Stimpson	University of Michigan	1105191
9:00	A Low Order Nonlinear Transport Acceleration Scheme for the Method of Characteristics	Lulu Li	Massachusetts Institute of Technology	1105319
9:20	p-CMFD ACCELERATION AND NONOVERLAPPING LOCAL/GLOBAL ITERATIVE TRANSPORT METHODS WITH 2-D/1-D FUSION KERNEL	Seungsu Yuk	Korea Advanced Institute of Science and Technology	1126428
9:40	APPLICATION OF THE SDD-CMFD ACCELERATION TECHNIQUE TO PARALLEL 3-D METHOD OF CHARACTERISTICS TRANSPORT	Brendan M. Kochunas	University of Michigan	1104795

### 3-1. Monte Carlo Methods (Atago)

Session Chair : Jaakko Leppänen(VTT), Takanori Kitada(Osaka Univ.)

8:00	UNSTRUCTURED MESH BASED MULTI-PHYSICS INTERFACE FOR CFD CODE COUPLING IN THE SERPENT 2 MONTE CARLO CODE	Jaakko Leppanen	VTT Technical Research Centre of Finland	1103981
8:20	ANALYZING THE STATISTICS OF GROUP CONSTANTS GENERATED BY SERPENT 2 MONTE CARLO CODE	Toni Kaltiaisenaho	VTT Technical Research Centre of Finland	1106126
8:40	Theoretical Prediction on Underestimation of Statistical Uncertainty for Fission Rate Tally in Monte Carlo Calculation	Tomohiro Endo	Nagoya University	1126624
9:00	ANALYSIS OF TALLY CORRELATION IN LARGE LIGHT WATER REACTORS	Bryan R. Herman	Massachusetts Institute of Technology	1094801
9:20	Higher-Mode Applications of Fission Matrix Capability for MCNP	Sean E Carney	University of Michigan	1105312
9:40	A Symmetric View Hiding the Ugly Truth	Dennis Mennerdahl	E Mennerdahl Systems	1106471

### SS8. Reactor Physics of Non-Traditional LWR Fuel Design (Cosmos)

Session Chair : Bojan Petrovic(Georgia Tech.), Yoichiro Shimazu(Fukui Univ.)

8:00	I2S-LWR EQUILIBRIUM CYCLE CORE ANALYSIS	Fausto Franceschini	westinghouse	1126928
8:20	Uranium nitride composite fuels in a pressurized water reactor: exploration of multi-batch cycle length and UB4 admixture for reactivity control	Nicholas R Brown	Brookhaven National Laboratory	1104783
8:40	Impact of Coating on Nitride Fuel Performance in PWRs	Florent Heidet	Argonne National Laboratory	1128293
9:00	OPTIMIZATION OF FULLY CERAMIC MICRO-ENCAPSULATED FUEL ASSEMBLY FOR PWR	Massimiliano Fratoni	University of California, Berkeley	1105391
9:20	Fully Ceramic Microencapsulated Fuels: Characteristics and Potential LWR Applications	Jeffrey J Powers	Oak Ridge National Laboratory	1127750
9:40	NEUTRONIC CHALLENGES OF ADVANCED BOILING WATER REACTOR DESIGNS	Korosh Shirvan	MIT	1126323

## September 30 (Tue.) 10:20-12:00

### 1-4. Reactor Analysis Method (Mizuho\_A)

Session Chair : Jess Gehin(ORNL), Scott Palmtag(Core Physics Inc.)

10:20	Watts Bar Unit 1 Cycle 1 Zero Power Physics Tests Analysis with VERA-CS	Jess C. Gehin	Oak Ridge National Laboratory	1127867
10:40	AP1000R PWR REACTOR PHYSICS ANALYSIS WITH VERA-CS AND KENO - PART I: ZERO POWER PHYSICS TESTS	Fausto Franceschini	westinghouse	1126938
11:00	AP1000 PWR REACTOR PHYSICS ANALYSIS WITH VERA-CS AND KENO - PART II: POWER DISTRIBUTION	fausto franceschini	westinghouse	1126207
11:20	SOLUTION OF THE BEAVRS BENCHMARK USING THE nTRACER DIRECT WHOLE CORE TRANSPORT CODE	Min Ryu	Seoul National University	1104549
11:40	CALCULATION OF THE PRESSURE VESSEL FLUENCE IN THE HUNGARIAN VVER-440 PLANTS FOR THE LIFETIME EXTENSION	Gyorgy Hegyi	Magyar Tudományos Akademia Energiatudományi Kutatóközpont	1084093

## 5-2. Nuclear Criticality Safety (Mizuho\_B)

Session Chair : Bo Feng(ANL), Tomohiro Endo(Nagoya Univ.)

10:20	UNCERTAINTY EVALUATION OF REACTIVITY IN SINGLE AND MULTI-REGION TSUNAMI MODELING ANALYSIS FOR DRY CASK STORAGE	Quentin T Newell	University of Nevada, Las Vegas (UNLV)	1087608
10:40	Transient Analysis in Super Critical Condition for Several Fuel-solution Tanks System with Different Layout	Haruka Kikuchi	Department of Nuclear Engineering, Tokyo Institute of Technology	1119923
11:00	Comparison of Gamma Dose Rate Calculations for PWR Spent Fuel Assemblies	Bo Feng	Argonne National Laboratory	1106285
11:20	SPENT FUEL CANISTER CRITICALITY CALCULATION IN GROUNDWATER PENETRATION ACCIDENT	si yuan wu	East China Institute of Technology, Ministry of Education	1092274
11:40	FAVORABLE FEATURES IN KINETICS OF FAST REACTORS WITH PHYSICALLY THICK 208Pb-REFLECTOR	Gennady Genrikhovich Kulikov	National Research Nuclear University Moscow Engineering Physics Institute	1092833

## 2-2. Deterministic Transport Theory (Hiel)

Session Chair : Farzad Rahanema(Georgia Tech. Univ.), Wu Hongchun(Xi'an Jiaotong univ.)

10:20	Iterative Properties of the Integral Transport Matrix Method for the DD Scheme in 2D Cartesian Geometry	Dmitriy Anistratov	North Carolina State University	1106264
10:40	Neutron Leakage Treatment in Reactor Physics: Consequences on SFR Characteristics Prediction	Gerald Rimpault	CEA	1104627
11:00	REVISIT BOUNDARY CONDITIONS FOR THE SELF-ADJOINT ANGULAR FLUX FORMULATION	Yaqi Wang	Idaho National Laboratory	1102705
11:20	Accuracy Preserving Surrogate for Neutron Transport Calculations	Congjian Wang	North Carolina State University	1127699

## 13. Radiation Applications and Nuclear Safeguards (Atago)

Session Chair : Alexis C. Kaplan(Michigan Univ.), Yasunori Kitamura(JAEA)

10:20	DESIGN OF LONG NEUTRON COUNTER FOR INTENSIFIED D-T NEUTRON SOURCE	Yanan Li	Institute of Nuclear Energy Safety Technology, CAS - FDS Team	1126839
10:40	Utilizing Simulated Rossi-Alpha Distributions to Develop New Methods of Characterizing Spent Nuclear Fuel	Alexis C Kaplan	LANL / University of Michigan	1104803
11:00	ANTINEUTRINO EMISSION FROM FUELS WITH HIGH PROLIFERATION RESISTANCE	Tomooki SHIBA	SUBATECH Laboratory	1123449
11:20	Validation of the Implicit Correlation Method in MCPNX-PoliMi using Plutonium Cross-Correlation Measurements	Matthew James Marcatth	University of Michigan, Ann Arbor	1105483
11:40	A UNIQUE TUNGSTEN-BASED TAGGING APPROACH FOR MAINTAINING OF CONTINUITY OF KNOWLEDGE OF NUCLEAR WASTE COPPER CANISTERS	Dina Chernikova	Chalmers University of Technology	1127570

## 9-1. Transient and Safety Analysis (Cosmos)

Session Chair : Kostadin Ivanov(Pennsylvania Univ.), Yuichiro Ban(Toshiba)

10:20	DEVELOPMENT OF NEUTRON KINETIC CODE FOR MOLTEN SALT REACTOR	youqi zheng	Xi'an Jiaotong University	1084871
10:40	STUDY OF NEUTRON PROPAGATION IN MULTIGROUP TRANSPORT BY SPACE ASYMPTOTIC METHODS	Julio C.L. Fernandes	Politecnico di Torino	1102531
11:00	Sensitivity Analysis and Performance of the Adiabatic, Theta, and Multigrid Amplitude Function Kinetics Methods in 2D MOC Neutron Transport	Samuel Shaner	Massachusetts Institute of Technology	1105035
11:20	Computations of heterogeneous dilution transients using CFX and HEMERA V1	Ludovic Maas	IRSN	1094627
11:40	Prompt Behavior of Generalized-Eigenvalue Point Kinetics Models	Brian C Kiedrowski	Los Alamos National Laboratory	1107334

## September 30 (Tue.) 13:30-15:40

### 1-5. Reactor Analysis Method (Mizuho\_A)

Session Chair : Myung Hyun Kim(Kyung Hee University), Masahiro Tatsumi(NEL)

13:30	AUTOMATIC CONSTRUCTION OF A SIMPLIFIED BURN-UP CHAIN MODEL BY THE SINGULAR VALUE DECOMPOSITION	Takanori Kajihara	Hokkaido University	1105724
13:50	Generation of simplified burnup chain using contribution matrix of nuclide production	Ryota Katano	Nagoya University	1101303
14:10	IMPORTANT FISSION PRODUCT NUCLIDES IDENTIFICATION METHOD FOR SIMPLIFIED BURNUP CHAIN CONSTRUCTION	Go CHIBA	Hokkaido university	1068216
14:30	Application of Backtracking Algorithm to Depletion Calculations	Mingyu Wu	Wu Mingyu	1065760
14:50	Modeling the Cross Section of Gadolinia Pins in the Depletion for Pin-by-Pin Core Calculations	Yasuhiro Kodama	Nuclear Fuel Industries, Ltd.	1105480
15:10	THE OPTIMIZED ALGORITHM FOR THE MICROSCOPIC DEPLETION MODEL IN THE COGAGNE CORE CODE A 2-LEVEL CORE PARTITIONING APPROACH	Matthieu Raju Guillo	EDF R&D	1127599

### 4-1. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Hany Abdel-Khalik(NSCU), Kenji Yokoyama(JAEA)

13:30	Validation and benchmarking of calculation methods for photon and neutron transport at cask configurations	Luc Schlomer	WTI Wissenschaftlich-Technische Ingenieurberatung GmbH	1086809
13:50	RECENT ADVANCES IN THE V&V OF THE NEW FRENCH CEA APOLLO3R NEUTRON TRANSPORT CODE : BENCHMARKS ANALYSIS OF THE FLUX SOLVERS	Jean-Marc Palau	CEA	1086829
14:10	DECART CODE VERIFICATIONS BY NUMERICAL BENCHMARK CALCULATIONS OF HTR	Chag Joon Jeong	Korea Atomic Energy Research Institute	1101312

14:30	DEVELOPMENT AND VERIFICATION OF THREE-DIMENSIONAL HEX-Z BURNUP SENSITIVITY SOLVER BASED ON GENERALIZED PERTURBATION THEORY	Kenji Yokoyama	Japan Atomic Energy Agency	1106037
14:50	Validation of HELIOS for ATR Core Follow Analyses	Samuel E Bays	Idaho National Laboratory	1081829
15:10	PERSENT: NEED OF A DETERMINISTIC CODE FOR SENSITIVITY ANALYSIS IN 3D GEOMETRY AND TRANSPORT THEORY	GERARDO ALIBERTI	Argonne National Laboratory	1100850

### 2-3. Deterministic Transport Theory (Hiei)

Session Chair : Yousry Azmy(North Carolina State Univ.), Kazuya Yamaji(MHI)

13:30	Axial Transport Solvers for the 2D/1D Scheme in MPACT	Shane Gray Stimpson	University of Michigan	1105193
13:50	Development of Legendre Expansion of Angular Flux Method for 3D MOC Calculation	Yuki KATO	Nagoya University	1106157
14:10	BENCHMARK ON DETERMINISTIC TIME-DEPENDENT TRANSPORT CALCULATIONS WITHOUT SPATIAL HOMOGENISATION	Victor F. Boyarinov	NRC Kurchatov Institute	1102516
14:30	Coarse-grained parallelism for full-core transport calculations	Roland Lenain	CEA France	1127828
14:50	PARALLEL PERFORMANCE RESULTS FOR THE OPENMOC METHOD OF CHARACTERISTICS CODE ON MULTI-CORE PLATFORMS	William Boyd	MIT	1104798
15:10	MAKING MORE PRECISE THE SURFACE PSEUDOSOURCES METHOD FOR RBMK CLUSTER CELLS	Nikolay V. Sultanov	NRC "Kurchatov institute"	1103956

### 3-2. Monte Carlo Methods (Atago)

Session Chair : Kan Wang(Tsinghua Univ.), Yasushi Nauchi(CRIEPI)

13:30	A MONTE CARLO METHOD FOR PROMPT AND DELAYED ALPHA EIGENVALUE CALCULATIONS	Andrea Zoia	CEA/Saclay	1099127
13:50	GEOMETRY NAVIGATION ACCELERATION BASED ON AUTOMATIC NEIGHBOR SEARCH AND ORIENTED BOUNDING BOX IN MONTE CARLO SIMULATION	Zhenping Chen	Institute of Nuclear Energy Safety Technology, CAS · FDS Team	1104233
14:10	Continuous-Energy Monte Carlo Methods for Calculating Generalized Response Sensitivities using TSUNAMI-3D	Christopher Michael Perfetti	Oak Ridge National Laboratory	1127880
14:30	Enhancements in Continuous-Energy Monte Carlo Capabilities in SCALE 6.2	Bradley Thomas Rearden	Oak Ridge National Laboratory	1142583
14:50	Leakage-corrected fast reactor assembly calculation with Monte-Carlo code TRIPOLI4 and its validation methodology	li cai	CEA, DEN, DER/SPRC	1102576
15:10	Impact of Nearest Neighbor Distribution of Fuel Particle on Neutronics Characteristics in Statistical Geometry Model	Takahiro Koide	Nagoya University	1101295

### 12-1. Fuel Cycle and Actinide Management (Cosmos)

Session Chair : Nicolas Brown (BNL), Naoyuki Takaki(Tokyo City Univ.)

13:30	SIMULATION OF FUEL CYCLES WITH MINOR ACTINIDE MANAGEMENT USING A FAST BURNUP CALCULATION TOOL	Mate Szieberth	Budapest University of Technology and Economics, Institute of Nuclear Techniques	1127550
13:50	Variations in activity, toxicity and decay heat of nuclear waste of various fuel cycles	Nicolas Emile Stauff	Argonne National Laboratory	1104106
14:10	EFFECT OF HETEROGENEITY IN PLUTONIUM RECYCLING IN STEADY STATE PWR	Marc Ernout	Institut de Physique Nucleaire	1105805
14:30	EVALUATION METHOD OF EQUIVALENCE FACTORS FOR MOX FUEL AND NON-LINEAR "Equivalent Pu-239" FORMULA	Mikio TOKASHIKI	Nuclear Fuel Industries, Ltd.	1105974
14:50	Development of a Fuel Performance Code for Thorium-Plutonium Fuel	Klara Linnea Insulander Bjork	Thor Energy and Chalmers University of Technology	1127573
15:10	Two-Stage Fuel Cycles with Accelerator-Driven Systems	Florent Heidet	Argonne National Laboratory	1106238

## September 30 (Tue.) 15:55-18:05

### 1-6. Reactor Analysis Method (Mizuho\_A)

Session Chair : Mohamed Elswai(Khalifa University), Yunzhao Li(Xi'an Jiaotong University)

15:55	MODELLING OF SHUTDOWN COOLING REACTIVITY EFFECTS WITH SIMULATE	Tamer Bahadir	Studsvik Scandpower, Inc.	1106193
16:15	IMPLEMENTATION AND VERIFICATION OF THE SDM IN THE TITAN 3-D Sn TRANSPORT CODE	Nathan John Roskoff	Virginia Tech	1106648
16:35	TRANSPORT CORE SOLVER VALIDATION FOR THE ASTRID CONCEPTUAL DESIGN STUDY WITH APOLLO3R	Jean-Francois Vidal	CEA Cadarache	1101764
16:55	METHODOLOGY ASSESSMENT FOR THE EVALUATION OF THE COOLANT VOID WORTH IN SODIUM FAST REACTORS WITH A LOW VOID EFFECT CORE DESIGN	SARA BORTOT	Paul Scherrer Institut (PSI)	1099616
17:15	Results of verification of computer codes used for analysis of BN-1200 reactor core neutronics	Elena Marova	OKBM	1104321
17:35	APOLLO3R based method for 3D warped cores calculations ; Application to flowering tests of Phenix	Cyril Patricot	CEA	1106232

### 4-2. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Bassam Khuwaleh(NCSU), Kensuke Kojima(JAEA)

15:55	BENCHMARK CALCULATION WITH MOSRA-SRAC FOR BURNUP OF A BWR FUEL ASSEMBLY	Kensuke Kojima	Japan Atomic Energy Agency	1126354
16:15	VERIFICATION OF THE COGAGNE CORE CODE USING CLUSTER DEPLETION CALCULATIONS	Fabrice Hoareau	EDF R&D	1094607
16:35	LWR Fuel Reactivity Depletion Verification Using 2D Full Core MOC and Flux Map Data	Geoffrey A Gunow	Massachusetts Institute of Technology	1106258
16:55	CASMO-4E and CASMO-5 Analysis of the Isotopic Compositions of the LWR-PROTEUS Phase II Burnt PWR UO2 Fuel Samples	Peter Grimm	Paul Scherrer Institute (PSI)	1104066
17:15	EXPERIMENTAL VALIDATION OF DECAY HEAT CALCULATIONS WITH VESTA 2.1	Wim Haeck	IRSN	1102701
17:35	DEVELOPMENT AND VALIDATION OF AD HOC ORIGEN-ARP LIBRARIES FOR VERY HIGH BURNUP UO2 PWR FUEL WITH SCALE/TRITON	Stefano Caruso	National Cooperative for the Disposal of Radioactive Waste (NAGRA)	1095732

### 2-4. Deterministic Transport Theory (Hiei)

Session Chair : Ricardo Barros(Univ. do Estado do Rio de Janeiro), Tesuo Matsumura(CRIEPI)

15:55	Phase Space Bases for Response Matrix Methods	Jeremy A Roberts	Kansas State University	1107355
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16:15	The Drift Diffusion Limit of Thermal Neutrons: Theoretical and Numerical Results	Pablo A Vaquer	Texas A&M University	1126267
16:35	Adequacies of Different Convergence Accuracy Measures in Full-Core Nodal Flux Computations	Rene van Geemert	AREVA GmbH	1137347
16:55	FLEXIBLE SEMI-ANALYTICAL CALCULATION METHOD OF ESCAPE PROBABILITY	Tetsuo Matsumura	CRIEPI	1094291
17:15	CORRECTED DIAMOND DIFFERENCE METHOD FOR COUPLING FROM THE METHOD OF CHARACTERISTICS TO DISCRETE ORDINATES	Mitchell T.H. Young	University of Michigan	1106304
17:35	ENERGY MULTIGROUP SPECTRAL GREEN'S FUNCTION CONSTANT NODAL METHOD FOR FIXED-SOURCE $S_n$ PROBLEMS IN X-Y-GEOMETRY	Ricardo C. Barros	Universidade do Estado do Rio de Janeiro	1121396

### 3-3. Monte Carlo Methods (Atago)

Session Chair : Daniel J. Kelly(Knolls Atomic Power Laboratory), Zeguang LI(Tsinghua University)

15:55	LARGE-SCALE MONTE CARLO CALCULATIONS WITH THERMAL-HYDRAULIC FEEDBACK	Aleksandar Stoyanov Ivanov	Karlsruher Institut fur Technologie	1127876
16:15	SODIUM VOID REACTIVITY EFFECT ANALYSIS USING THE NEWLY DEVELOPED EXACT PERTURBATION THEORY IN MONTE-CARLO CODE TRIPOLI-4	Guillaume Truchet	CEA, DEN, DER/SPRC/LEPh, Cadarache	1104427
16:35	Monte Carlo Perturbation Analysis on Isothermal Temperature Reactivity Coefficient of Light-Water Moderated and Reflected Critical Assembly	Byoung Kyu Jeon	Seoul National University	1105946
16:55	Monte Carlo and Thermal-Hydraulic Coupling via PVMEXEC	Daniel F. Gill	Bechtel Marine Propulsion Corporation	1142507
17:15	Perturbation Based Monte Carlo Criticality Search in Density, Enrichment and Concentration	Zeguang LI	Tsinghua University	1104699
17:35	Monte Carlo Perturbation Method for Geometrical Uncertainty Analysis using McCARD	Ho Jin Park	Korea Atomic Energy Research Institute	1105031

### 12-2. Fuel Cycle and Actinide Management (Cosmos)

Session Chair : Alberto Talamo(ANL), Kazufumi Tsujimoto(JAEA)

15:55	Thorium-Fueled Breed-and-Burn Fuel Cycle	Florent Heidet	Argonne National Laboratory	1106234
16:15	Fuel Cycle Analysis of a Self-Sustaining Light Water Cooled Reactor with $^{232}\text{Th}/^{233}\text{U}$ Fuel and Impact of $^{233}\text{U}$ ( $n, \gamma$ ) Cross Section Evaluations	Nicholas R Brown	Brookhaven National Laboratory	1104784
16:35	PRODUCTION OF $^{232}\text{U}$ FROM IRRADIATION OF STANDARD AND THORIUM-BASED FUELS IN PWR REACTORS	Baptiste Leniau	Subatech	1105816
16:55	FUEL CYCLE SCHEME DESIGN AND EVALUATION FOR THORIUM-URANIUM BREEDING RECYCLE IN CANDU REACTORS	Bo YANG	Shanghai Nuclear Engineering Research and Design Institute	1087546
17:15	An Inventory Analysis of Thermal-Spectrum Thorium-Fueled Molten Salt Reactor Concepts	Jeffrey J. Powers	Oak Ridge National Laboratory	1126252
17:35	Agent-Based Dynamic Resource Exchange in Cyclus	Matthew J. Gidden	UW - Madison	1104469

## October 1 (Wed.) 8:00-10:05

### 1-7. Reactor Analysis Method (Mizuho\_A)

Session Chair : Eleodor Nichita(University of Ontario Institute of Technology), Chang Joon Jeong(KAERI)

8:00	High order source approximaion for the EFEN method	Yunzhao Li	School of Nuclear Science and Technology, Xi'an Jiaotong University	1106187
8:20	EXTENSION OF LINEAR SOURCE MOC METHODOLOGY TO ANISOTROPIC SCATTERING IN CASMO5	Rodolfo M. Ferrer	Studsvik Scandpower, Inc.	1099700
8:40	FINITE DIFFERENCE EQUATIONS FOR NEUTRON FLUX AND IMPORTANCE DISTRIBUTION IN A HETEROGENEOUS REACTOR WITHOUT HOMOGENIZATION AND DIFFUSION APPROXIMATION	Aleksandr V Elshin	Alexandrov Research Institute of Technology, Rosatom	1104610
9:00	EFFICIENT SUBSPACE CONSTRUCTION FOR REDUCED ORDER MODELING IN REACTOR ANALYSIS	Bassam A. Khuwaileh	Department of Nuclear Engineering North Carolina State University, Raleigh, NC, USA	1126237
9:20	Variational Acceleration of Fission Source Iteration for Subcritical Source-Driven Systems	Bilge Ozgener	Istanbul Technical University	1124804
9:40	An Incident Flux Coupling Calculation Study for Nodal Method and Monte Carlo Method	Xinzhe Wang	China Institute of Atomic Energy	1104763

### 4-3. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Nuria Garcia Herranz(Univ. Politecnica de Madrid), Go Chiba(Hokkaido Univ.)

8:00	Confidence interval estimation by bootstrap method for uncertainty quantification using random sampling method	Tomohiro Endo	Nagoya University	1084668
8:20	Uncertainty quantification of neutronics characteristics using Latin Hypercube Sampling method	Kuniharu Kinoshita	Nagoya University	1101192
8:40	Uncertainty Quantification of BWR Core Characteristics using Latin Hypercube Sampling Method	Akio Yamamoto	Nagoya University	1090063
9:00	Applicability of the cross section adjustment method based on random sampling technique for burnup calculation	Tomoaki Watanabe	Nagoya University	1098930
9:20	NUSS-RF: Stochastic Sampling-Based Tool for Nuclear Data Sensitivity and Uncertainty Quantification	Ting Zhu	Paul Scherrer Institut	1102712
9:40	MOCABA: A General Monte Carlo-Bayes Procedure for Improved Predictions of Integral Functions of Nuclear Data	Axel Hoefler	AREVA GmbH Offenbach, Germany	1104105

### SS3. Hybrid Particle Transport Methods for Solving Complex Problems in Real-Time (Hiei)

Session Chair : Alireza Haghghat(Virginia Tech Univ.), Kazuya Yamaji(MHI)

8:00	DISCRETIZED MESH TOOLS AND RELATED TREATMENT FOR HYBRID TRANSPORT APPLICATION WITH 3D DISCRETE ORDINATES AND MONTE CARLO	Kevin L Manalo	Georgia Institute of Technology	1106684
8:20	A NOVEL HYBRID WEIGHTING SCHEME FOR MULTI-GROUP CROSS SECTION COLLAPSING	Ce Yi	Georgia Institute of Technology	1106722
8:40	Development of An Iterative Lattice-Core Coupling Method Based on MICROX-2 Cross Section Libraries	Jason Hou	The Pennsylvania State University	1104276

9:00	SOLUTION OF A STYLIZED EUROPEAN PRESSURIZED REACTOR (EPR) BENCHMARK PROBLEM USING THE COARSE MESH RADIATION TRANSPORT METHOD (COMET)	Daniel Lago	Georgia Institute of Technology	1106263
9:20	COMPUTATIONAL EFFICIENCY AND ACCURACY OF THE FISSION COLLISION SEPARATION METHOD IN 3D HTTR BENCHMARK PROBLEMS	Dingkang Zhang	Georgia Institute of Technology	1106314
9:40	Use of the Fission Matrix Method for Solution of the Eigenvalue Problem in a Spent Fuel Pool	William J Walters	Virginia Tech	1107387

### 3-4. Monte Carlo Methods (Atago)

Session Chair : Ho Jin Park(KAERI), Toshihiro Yamamoto(KURRI)

8:00	XS BENCH - THE DEVELOPMENT AND VERIFICATION OF A PERFORMANCE ABSTRACTION FOR MONTE CARLO REACTOR ANALYSIS	John Robert Tramm	Argonne National Laboratory	1106774
8:20	Development of Neutron Current Connection Method for Whole Core Analysis Based on Monte Carlo Method	Naoyuki Nakadozono	Hitachi Research Laboratory, Hitachi, Ltd.	1126312
8:40	Analysis of Select BEAVRS PWR Benchmark Cycle 1 Results Using MC21 and OpenMC	Daniel J. Kelly	Bechtel Marine Propulsion Corporation	1138691
9:00	Monte Carlo Neutronics Analysis of Sodium-cooled fast Reactor Benchmark with OTF Temperature and Burnup Treatment	Nicole Simone Guilliard	University Stuttgart - IKE	1127863
9:20	VERIFICATION OF COUPLED 3D FUEL CYCLE ANALYSIS WITH STABLE MONTE CARLO BASED CODE, BGCORE, AGAINST THE NODAL DIFFUSION DYN3D CODE	Dan Kotlyar	University of Cambridge	1126263
9:40	Domain Decomposition and Terabyte Tallies with the OpenMC Monte Carlo Neutron Transport Code	Nicholas E Horelik	Massachusetts Institute of Technology	1106210

### 9-2. Transient and Safety Analysis (Cosmos)

Session Chair : Miriam Daeubler(KIT), Shigeaki Aoki(MNF)

8:00	RECRITICALITY RISK IN PWR SPENT FUEL POOLS	Guillaume Grandjean	Institut National des Sciences et Techniques Nucléaires	1081521
8:20	DEMONSTRATION OF FULLY COUPLED SIMPLIFIED EXTENDED STATION BLACK-OUT ACCIDENT SIMULATION WITH RELAP-7	Haihua Zhao	Idaho National Laboratory	1100842
8:40	CODE SCALING APPLICABILITY TO A COLD LEG SBLOCA SCENARIO IN A NUCLEAR POWER PLANT	Andrea Querol	Universitat Politècnica de Valencia	1106251
9:00	TRANSIENT SIMULATION OF GAS BUBBLE IN A MEDIUM SIZED LEAD COOLED FAST REACTOR	Carl Fredrik Hellesten	Uppsala University	1106269
9:20	Power Ramp Transient in a Sodium-Cooled Fast Reactor used for Minor Actinides Transmutation	Sara Perez-Martin	Karlsruhe Institute of Technology	1127822
9:40	STEP TOWARDS INTEGRAL VALIDATION OF ENERGETIC RE-CRITICALITY PREDICTION FOR SODIUM COOLED FAST REACTOR	Tatiana Ivanova	Institut de Radioprotection et de Surete Nucleaire (IRSN)	1126197

## October 1 (Wed.) 10:20-12:00

### 1-8. Reactor Analysis Method (Mizuho\_A)

Session Chair : Youqi Zheng(Xi'an Jiaotong University), Tatsuya Iwamoto(GNF-J)

10:20	Modernization Enhancements in SCALE 6.2	Bradley T. Rearden	Oak Ridge National Laboratory	1153741
10:40	SALOME-CORE platform: uses for EDF R&D neutronic studies	Hadrien Leroyer	EDF R&D	1086739
11:00	A STEADY-STATE CORE ANALYSIS CODE FOR THE MODELING OF ACCELERATOR-DRIVEN SUBCRITICAL REACTORS	Shengcheng Zhou	Xi'an Jiaotong University	1085680
11:20	Good Practice in Development of Advanced Assembly/Core Calculation Methods and Implementations of AEGIS/SCOPE2	Masahiro Tatsumi	Nuclear Engineering Ltd.	1105705
11:40	VALIDATION OF LANCR01/AETNA01 BWR CODE PACKAGE AGAINST FUBILA MOX EXPERIMENTS AND FUKUSHIMA DAIICHI NUCLEAR POWER PLANT UNIT 3 MOX CORE	Tatsuya Iwamoto	Core Design Group, Global Nuclear Fuel-Japan	1100982

### 4-4. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Oscar Cabellos(Univ. Politecnica de Madrid), Hiroki Iwamoto(JAEA)

10:20	Pinpower Uncertainty Quantification of LWR-PROTEUS Phase III Experiments	Mathieu Hursin	Paul Scherrer Institut	1099077
10:40	QUANTIFICATION OF CODE, LIBRARY AND CROSS-SECTION UNCERTAINTY EFFECTS ON THE VOID REACTIVITY COEFFICIENT OF A BWR UO <sub>2</sub> ASSEMBLY	Olivier Leray	Paul Scherrer Institut	1100815
11:00	SENSITIVITY AND UNCERTAINTY ANALYSIS OF BURNUP REACTIVITY FOR AN ACCELERATOR-DRIVEN SYSTEM	Hiroki Iwamoto	Japan Atomic Energy Agency	1104912
11:20	SENSITIVITY/UNCERTAINTY ANALYSIS FOR BWR CONFIGURATIONS OF EXERCISE 1-2 OF UAM BENCHMARK	Nuria Garcia-Herranz	Universidad Politecnica de Madrid	1106021
11:40	IMPACT OF THE FISSION YIELD NUCLEAR DATA UNCERTAINTIES IN THE PIN-CELL BURN-UP OECD/NEA UAM BENCHMARK	Oscar Cabellos	Universidad Politecnica de Madrid	1105867

### 8-1. Reactor Operation and Safety (Hiei)

Session Chair : Gerald Rimpault(CEA), Hiroshi Akiie(JAEA)

10:20	Effects of cross sections libraries parameters on the OECD/NEA Oskarshamn-2 Benchmark solution	Paolo Balestra	ENEA	1126097
10:40	EVALUATION OF OPERATIONAL EXPERIENCES AND REACTOR PHYSICS TESTS OF MOX LOADED BWR CORES	Yusuke Kuroda	TEPCO SYSTEMS CORPORATON	1086934
11:00	Coupling effects in large reactor cores: the impact of heavy and conventional reflectors on power distribution perturbations	Antonio Sargeni	IRSN	1099602
11:20	IMPROVE THE ACCURACY OF THE POWER DISTRIBUTION RECONSTRUCTION USING POWER DISTRIBUTIONS OF DIFFERENT STATUS AS THE FUNDAMENTAL HARMONIC	Kai FAN	Tsinghua University	1093593

### 6-1. Reactor Physics Experiments (Atago)

Session Chair : Patrick Blaise(CEA), Takuya Umata(Toshiba)

10:20	Static Modal Analysis of the Current-to-Flux Subcriticality Monitor for Accelerator-Driven Systems	Wim Uytendhoeve	SCK-CEN, Belgian Nuclear Research Centre	1104770
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10:40	12 YEARS OF FRANCO-JAPANESE INTERNATIONAL PROGRAMS IN EOLE FOR THE VALIDATION OF 100%MOX RECYCLING IN LWRS	Patrick BLAISE	DEN,CAD, Department of Reactor Studies, Experimental Physics Section - SPEX / DEN,CAD, Department of Nuclear Technology - STPI	1104068
11:00	Application of the best representativity method to a future PWR fuel assembly calculation using four critical experiments of different facilities	Takuya UMANO	Toshiba Corporation Power Systems Company	1104323
11:20	CHARACTERIZATION OF IRRADIATION FIELDS IN THE EXPERIMENTAL FAST REACTOR JOYO FOR FUEL AND MATERIAL IRRADIATION	Shigetaka Maeda	Japan Atomic Energy Agency	1098227
11:40	Reaction Rate, Fission Product Yield, and Rossi-Alpha Measurements Using a HEU Metal, Copper Reflected Critical Assembly	Rene G. Sanchez	Los Alamos National Laboratory	1105192

### 9-3. Transient and Safety Analysis (Cosmos)

Session Chair : Silva Kalcheva(SCK/CEN), Mikio Tokashiki(NFI)

10:20	SIMMER-III MODELING OF GAS COOLED FAST REACTOR	Xue-Nong Chen	Karlsruhe Institute of Technology (KIT), Institute for Nuclear and Energy	1106163
10:40	VALIDATION OF THE SUBCHANNEL CODE CTF AGAINST THE BENCHMARK DATA OF THE OECD/NEA PSBT	Patricio Hidalgo	Universitat Politcnica de Valencia	1106259
11:00	VALIDATION OF CASMO5 / SIMULATE-3K USING THE SPECIAL POWER EXCURSION TEST REACTOR III E-CORE: COLD START-UP, HOT START-UP, HOT STANDBY AND FULL POWER CONDITIONS	Gerardo M. Grandi	Studsvik Scandpower, Inc.	1099703
11:20	VALIDATION OF THE NODAL KINETICS CODE SYSTEM GALAXY/COSMO-K USING THE SPERT-III E-CORE EXPERIMENTS	Kazuya Yamaji	Mitsubishi Heavy Industries, Ltd.	1119885
11:40	Propagation of Nuclear Data Uncertainty for a Control Rod Ejection Accident using the Total Monte-Carlo Method	Dirceu F. da Cruz	Nuclear Research and Consultancy Group NRG	1102512

## October 1 (Wed.) 13:30-15:40

### 1-9. Reactor Analysis Method (Mizuho\_A)

Session Chair : Richard Sanchez(CEA), Baocheng Zhang(WH)

13:30	Resonant Upscattering Effects on U238 Absorption Rates	CLAUDE MOUNIER	Commissariat a l'energie atomique et aux energies alternatives	1106006
13:50	The up-scattering treatment in the fine-structure self-shielding method in APOLLO3	Li LEI-MAO	CEA	1107332
14:10	Target Motion Sampling Temperature Treatment Technique with Track-length Estimators in OpenMC - Preliminary Results	Tuomas Viitanen	VTT Technical Research Centre of Finland	1106078
14:30	Problem-Dependent Doppler Broadening of Continuous-Energy Cross Sections in the KENO Monte Carlo Computer Code	Shane William Daniel Hart	The University of Tennessee	1101879
14:50	VERIFICATION OF DOUBLY-HETEROGENEOUS SELF-SHIELDING METHOD BASED ON EQUIVALENCE THEORY	Sooyoung Choi	Ulsan National Institute of Science and Technology	1106138
15:10	Quantification of Resonance Interference Effect for Multi-Group Effective Cross-Section in Lattice Physics Calculation	Hiroki Koike	Mitsubishi Heavy Industries, Ltd.	1105375

### 4-5. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Maria Avramova(Penn State University), Willen F. G. Rooijen(Fukui Univ.)

13:30	Deterministic approach of the decay heat uncertainty due to JEFF-3.1.1 nuclear data uncertainties with the CYRUS tool and the DARWIN2.3 depletion code	Vanessa Vallet	CEA/DEN	1104036
13:50	Bias and Uncertainty Assessment of Pressurized Water Reactor Fuel Isotopics	Ryan Nathaniel Bratton	The Pennsylvania State University	1127866
14:10	INVENTORY UNCERTAINTY QUANTIFICATION AND PROPAGATION USING TENDL COVARIANCE DATA IN FISPACT-II	jean-christophe cyrille Sublet	United Kingdom Atomic Energy Authority	1103900
14:30	Validation of CASMO5 spent fuel isotopics with decay and fission yield uncertainties	Joshua Hykes	Studsvik Scandpower, Inc.	1104131
14:50	UNCERTAINTY PROPAGATION AND SENSITIVITY ANALYSIS IN THE ALEPH MONTE CARLO BURNUP CODE: APPLICATIONS TO FISSION PULSE DECAY HEAT CALCULATIONS	Luca Fiorito	SCKCEN	1106036
15:10	UNCERTAINTY QUANTIFICATION OF SPENT FUEL NUCLIDE COMPOSITIONS DUE TO CROSS SECTIONS, DECAY CONSTANTS AND FISSION YIELDS	Olivier Leray	Paul Scherrer Institut	1104088

### 7-1. Reactor Concepts and Designs (Hiei)

Session Chair : Bojan Petrovic(Georgia Tech. Univ.), Akiyuki Tsuchiya (Hitachi GE)

13:30	CONCEPTUAL STUDY OF A LONG-LIFE PGSFR	Donny Hartanto	KAIST	1104420
13:50	CORE DESIGN STUDIES ON THE FAST REACTOR WITH FLEXIBLE BREEDING RATIO	Yunlong Xiao	Xi an Jiaotong University	1092268
14:10	ENHANCED FEEDBACK EFFECTS IN SODIUM COOLED FAST REACTORS USING MODERATING MATERIAL - THE EFFECT OF THE PLUTONIUM CONTENT IN THE FUEL	Bruno Merk	Helmholtz-Zentrum Dresden-Rossendorf e.V.	1096317
14:30	ADVANCED SODIUM COOLED REACTOR CORES HAVING THORIUM BLANKETS FOR EFFECTIVE BURNING OF TRANSURANIC NUCLIDES	Wu Seung YOU	Kyung Hee University	1093377
14:50	PHISICS IMPROVEMENTS AND COMPARATIVE STUDY WITH ERANOS 2.2 ON THE GEN-IV LEAD-COOLED FAST REACTOR CONCEPT ALFRED	Francesco Lodi	University of Bologna	1104422
15:10	Velocity characteristic and stability of wave solutions for a candle reactor with thermal feedback	Volodymyr Khotyayintsev	Department of Physics, T. Shevchenko National University of Kyiv	1106054

### 3-5. Monte Carlo Methods (Atago)

Session Chair : Bradley Rearden(ORNL), Macro Pecchia(PSI)

13:30	Effects of Stochastic Noise on a Three-Dimensional Monte Carlo Depletion Analysis of the H.B. Robinson Reactor	Scott J Spychala	Bettis Atomic Power Laboratory	1142466
13:50	EFFICIENT ESTIMATION OF ADJOINT-WEIGHTED KINETICS PARAMETERS IN THE MONTE CARLO WIELANDT CALCULATIONS	Sung Hoon Choi	Korea Electrical Engineering & Science Research Institute	1105965
14:10	HIGHER-ORDER CHEBYSHEV RATIONAL APPROXIMATION METHOD (GRAM)	Maria Pusa	VTT Technical Research Centre of Finland	1119422



14:30	Efficiency and Accuracy Evaluation of the Windowed Multipole Direct Doppler Broadening Method	Colin Josey	Massachusetts Institute of Technology	1126651
14:50	DIFFUSION THEORY MONTE CARLO METHOD WITH TRANSPORT CORRECTIONS	Argala Srivastava	BHABHA ATOMIC RESEARCH CENTRE, MUMBAI, INDIA	1105538
15:10	GENERATION OF ONE-GROUP SELF SHIELDED CROSS SECTIONS WITH MULTI-GROUP APPROACH FOR MONTE CARLO BURNUP CODES	Dan Kotlyar	Ben Gurion University	1084485

### 15. Research Related to Fukushima Accident (Cosmos)

Session Chair : Alireza Haghighat(Virginia Tech Univ.), Akio Yamamoto(Nagoya Univ.)

13:30	AREVA Dismantling and Decommissioning experience and Fuel Debris removal approach for Fukushima Dai-ichi	Konrad Schauer	AREVA	2000001
13:50	RE-CRITICALITY POTENTIAL AT FUKUSHIMA DAI ICHI UNIT 4 FOLLOWING THE MARCH 2011 EARTHQUAKE AND TSUNAMI	Alan H. Wells	Electric Power Research Institute (EPRI)	1106299
14:10	Why a criticality excursion was possible in the Fukushima spent fuel pool	Antonio SARGENI	IRSN	1085679
14:30	CRITICAL EXPERIMENTS FOR FUEL DEBRIS USING MODIFIED STACY	Kazuhiko IZAWA	Japan Atomic Energy Agency	1127170
14:50	CONCEPT OF CAPTURE CREDIT BASED ON NEUTRON INDUCED GAMMA RAY SPECTROSCOPY	Yasushi Nauchi	Central Research Institute of Electric Power Industry	1105423
15:10	A methodology for fast and accurate decay heat calculations for in-pool used fuel assemblies developed at AREVA La Hague reprocessing facility	Agnes Launay	AREVA NC Recycling	1125870

## October 2 (Thu.) 8:00-10:05

### 1-10. Reactor Analysis Method (Mizuho\_A)

Session Chair : Aldo Dall'Oso(AREVA NP), Christophe Demaziere(Chalmers Univ. of Tech.)

8:00	An Asymptotic Homogenized SP2 Approximation to the Boltzmann Equation. I. Derivation	Thomas G. Saller	University of Michigan	1106112
8:20	An Asymptotic Homogenized SP2 Approximation to the Boltzmann Equation. II. Discontinuity Factors and Numerical Testing	Thomas G. Saller	University of Michigan	1106177
8:40	GENERALIZED AND STANDARD MULTIGROUP NEUTRON DIFFUSION EQUATION EIGENVALUE PROBLEM WITH THE FINITE VOLUME METHOD	Alvaro Bernal	Universitat Politecnica de Valencia	1106303
9:00	A Generalized Multigroup Method Based on Finite Elements	Andrew T Till	Texas A&M University	1127687
9:20	AN ASYMPTOTIC, HOMOGENIZED, ANISOTROPIC, MULTIGROUP DIFFUSION APPROXIMATION TO THE NEUTRON TRANSPORT EQUATION	Travis John Trahan	Los Alamos National Laboratory	1105474
9:40	ACCURACY OF THE LINEAR DISCONTINUOUS GALERKIN METHOD FOR REACTOR ANALYSIS WITH RESOLVED FUEL PINS	Carolyn N McGraw	Texas A&M University	1127761

### 4-6. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Laurent Chabert(AREVA TA), Kenji Nishihara(JAEA)

8:00	SENSITIVITY AND UNCERTAINTY CALCULATIONS METHODS OF NEUTRONICS PARAMETERS IN PWR CORES PART I: THEORY AND SENSITIVITY CALCULATIONS	Toshikazu TAKEDA	Research Institute of Nuclear Engineering, University of Fukui	1100398
8:20	Constrained Quantities in Uncertainty Quantification: Ambiguity and Tips to Follow	Zoltan Perko	TU Delft, Department of Radiation Science and Technology, Nuclear Energy and Radiation Applications	1084579
8:40	ADJOINT-BASED SENSITIVITY AND UNCERTAINTY ANALYSIS OF LATTICE PHYSICS CALCULATIONS WITH CASMO-4	Maria Pusa	VTT Technical Research Centre of Finland	1106024
9:00	Nuclear data uncertainty propagation on power maps in large LWR cores	Alain Santamarina	CEA	1106197
9:20	Are Modeling Uncertainties Properly Considered in Neutronics Data Assimilation Analysis?	Paridhi Athe	North Carolina State University	1126688
9:40	Sensitivity Analysis via Reduced Order Adjoint Method	Youngsuk Bang	FNC Technology, Co., Ltd	1106183

### 7-2. Reactor Concepts and Designs (Hiei)

Session Chair : Jan L. Kloosterman(Delft University of Technology), Deokjung Lee(UNIST)

8:00	SmAHTR-CTC Neutronic Design	Dan Ilas	Oak Ridge National Laboratory	1154037
8:20	SUPPRESSION OF EXCESS REACTIVITY OF SMALL LONG-LIFE PRISMATIC HTGR WITH PASSIVE DECAY-HEAT REMOVAL	Odmaa Sambuu	Tokyo Institute of Technology	1105504
8:40	CONCEPTUAL DESIGN OF A SELF-SUSTAINABLE PRESSURIZED WATER REACTOR WITH BOILING CHANNELS	Marat Margulis	Ben Gurion University	1091293
9:00	Feasibility Study of Application of BigT	HwanYeal Yu	KAIST	1105145
9:20	Axially Homogeneous Thorium Fuel Designs for Transuranic Burning in Reduced-moderation BWRs	Benjamin A. Lindley	University of Cambridge	1068763
9:40	Neutronic Analysis of A Micro Modular Reactor	Francesco Venneri	Ultra Safe Nuclear Corporation	1127098

### 6-2. Reactor Physics Experiments (Atago)

Session Chair : Jacques Di Salvo(CEA), Kenichi Yoshioka(Toshiba)

8:00	AN IMPROVED FEYNMAN- $\alpha$ CORRELATION ANALYSIS WITH A MOVING-BUNCHING TECHNIQUE	Ryohei Okuda	Interdisciplinary Graduate School of Science and Engineering, Kinki University	1102247
8:20	AN ALTERNATIVE SOURCE JERK METHOD IMPLEMENTATION FOR THE SUBCRITICALITY ESTIMATION OF THE VENUS-F SUBCRITICAL CORE IN THE EREYA PROJECT	Anatoly Kochetkov	SCK-CEN, Belgium Nuclear Research Centre	1105864
8:40	PULSED NEUTRON AND SOURCE JERK EXPERIMENTS FOR REACTIVITY ASSESSMENT IN DEEP SUBCRITICAL CONFIGURATION: A CASE STUDY WITHIN THE FRAMEWORK OF THE EREYA PROJECT	Giorgia Mila	INFN - Section of Turin	1128133
9:00	Reactivity Measurement of the Lead Fast Subcritical VENUS-F Reactor using Beam Interruption Experiments	Thibault Matthieu Chevret	LPC Caen, ENSICAEN/Universite de Caen/CNRS-IN2P3	1087437
9:20	REACTIVITY MEASUREMENTS AT GUINEVERE FACILITY USING THE INTEGRAL $k_p$ METHOD	Sebastien Chabod	CNRS	1104440
9:40	ESTIMATION OF THE DELAYED NEUTRON FRACTION $\beta_{eff}$ OF THE MAESTRO CORE IN MINERVE ZERO POWER REACTOR	Erez Gilad	Department of Nuclear Engineering, Ben-Gurion University of Negev	1090478

## 10-1. Nuclear Data (Cosmos)

Session Chair : Pierre Leconte(CEA), Junichi Hori(KURRI)

8:00	COMAC: Nuclear Data Covariance Matrices Library for Reactor Applications	Pascal Archier	CEA, DEN, DER, SPRC, LEPH	1077966
8:20	Model-based Generation of Neutron Induced Fission Yields up to 20 MeV by the GEF Code	Kilian P. Kern	Karlsruhe Institute of Technology	1106067
8:40	EXPERIMENTS TO IMPROVE UNCERTAINTY OF THE 1st DELAYED NEUTRON GROUP ABUNDANCE IN FAST FISSIONS OF U238 AND SENSITIVITY STUDIES OF THE RELATIVE PARAMETERS	Heejun Chung	University of Florida	1104110
9:00	OBSERVATION OF NEUTRON THERMALIZATION IN GRAPHITE USING THE SLOWING-DOWN-TIME TECHNIQUE	Ayman I. Hawari	North Carolina State University	1105487
9:20	MEASUREMENT OF NEUTRON CAPTURE CROSS SECTION OF <sup>232</sup> Th IN THE LOW ENERGY REGION	Jun-ichi Hori	Research Reactor Institute, Kyoto University	1127786
9:40	New Revisions of Reactor Physics Standards	Dimitrios Cokinos	Brookhaven National Laboratory	1113347

## October 2 (Thu.) 10:20-12:00

### 1-11. Reactor Analysis Method (Mizuho\_A)

Session Chair : Alain Hebert(Ecole Polytechnique de Montreal), Ren-Tai Chiang(Energy Engineering Service)

10:20	Revisiting the Cloi perturbative approach for analyzing systems in fundamental mode conditions	Alain Hebert	Ecole Polytechnique de Montreal	1104443
10:40	A Generalization of Lambda-Mode Xenon Stability Analysis	Justin Michael Pounders	Bettis Atomic Power Laboratory	1127646
11:00	Preliminary Study of the Impact of Xe-135m on the PCR of CANDU	Jaeha Kim	KAIST	1105707
11:20	Verification of the spectral history correction method with fully coupled Monte-Carlo code BGCORE	Yurii Bilodid	Helmholtz-Zentrum Dresden-Rossendorf	1106131
11:40	CORE NEUTRONICS METHODOLOGIES APPLIED TO THE MOX-LOADED KAIST 1A BENCHMARK: REFERENCE TO INDUSTRIAL CALCULATIONS	Ansar CALLOO	EDF R&D/SINETICS	1092925

### 4-7. Verification, Validation and Uncertainty Analysis (Mizuho\_B)

Session Chair : Maria Pusa(VTT), Tadafumi Sano(KURRI)

10:20	Sensitivity and uncertainty analysis on reactor kinetic parameters using perturbation theory	Cyrille Bouret	Commissariat Energie Atomique et aux Energies Alternatives	1126308
10:40	Selecting benchmarks for reactor calculations	Erwin Alhassan	Division of Applied Nuclear Physics, Department of Physics and Astronomy, Uppsala University	1106307
11:00	DICE 2013: NEW CAPABILITIES AND DATA	Ian P Hill	OECD/NEA	1105736
11:20	OECD NEA Benchmark Database of Spent Nuclear Fuel Isotopic Compositions for World Reactor Designs	Ian C Gauld	Oak Ridge National Laboratory	1106253
11:40	Effective Physics-Based Uncertainty Quantification for ZrHx Thermal Neutron Scattering in TRIGA Reactors	Weixiong Zheng	Texas A&M University	1104568

### 8-2. Reactor Operation and Safety (Hiei)

Session Chair : Fausto Franceschini(WH), Naoyuki Nakadozono(Hitachi)

10:20	ADVANCED SURVEILLANCE OF RESISTANCE TEMPERATURE DETECTORS IN NUCLEAR POWER PLANTS	Cristina Montalvo	Technical University of Madrid (UPM)	1099698
10:40	REFINED METHOD FOR SURVEILLANCE AND DIAGNOSTICS OF THE CORE BARREL VIBRATIONS OF THE RINGHALS PWRs	Imre Pazsit	Chalmers Univ. of Technology	1104708
11:00	ASSESSMENT OF FLOW INDUCED VIBRATION LIMITS IN PRELIMINARY J2S-LWR FUEL DESIGNS	Glenn E. Sjoden	Georgia Institute of Technology	1106266
11:20	BLOCKAGE INDEX FOR THE DETECTION OF FLOW BLOCKAGE IN A SUBASSEMBLY OF SODIUM-COOLED FAST REACTOR	Hae-Yong Jeong	Sejong University	1122850
11:40	SECOND GENERATION SHIELDING ASSEMBLIES - NEUTRON FLUX IMPACT ON REACTOR PRESSURE VESSEL AND CORE DESIGN	Klaes-Hakan Bejmer	Vattenfall AB Sweden	1203930

### 6-3. Reactor Physics Experiments (Atago)

Session Chair : Nicholas Brown(BNL), Hironobu Unesaki(KURRI)

10:20	BNL Metal Fuel Lattice Experiments: Candidates for Reactor Physics Benchmark Evaluation	Nicholas R Brown	Brookhaven National Laboratory	1104785
10:40	Benchmark Evaluation of the Neutron Radiography (NRAD) Reactor Upgraded LEU-Fuel Core	John Darrell Bess	Idaho National Laboratory	1084758
11:00	CALIBAN AND GODIVA-IV MEASUREMENTS USING HELIUM-3 DETECTOR SYSTEMS	Jesson Hutchinson	LANL	1105154
11:20	POWER SPECTRAL ANALYSIS FOR A SUBCRITICAL REACTOR SYSTEM DRIVEN BY A PULSED SPALLATION NEUTRON SOURCE	Atsushi Sakon	Interdisciplinary Graduate School of Science and Engineering, Kinki University	1102582
11:40	Equivalencies of Open & Closed Loop Reactivity Measurements	Benjamin A Baker	Idaho State University	1130969

### SS4. Advanced Geometry Processing in Deterministic and Monte Carlo Methods (Cosmos)

Session Chair : Hyung Jin Shim(Seoul National Univ.), Shinya Kosaka(MHI)

10:20	DEVELOPMENT OF A MULTI-GROUP SN TRANSPORT CALCULATION CODE WITH UNSTRUCTURED TETRAHEDRAL MESHES	SER GI HONG	Kyung Hee University	1093366
10:40	DEVELOPMENT OF AN UNSTRUCTURED MESH BASED GEOMETRY MODEL IN THE SERPENT 2 MONTE CARLO CODE	Jaakko Leppanen	VTT Technical Research Centre of Finland	1101586
11:00	A CAD BASED AUTOMATIC MODELING METHOD FOR PRIMITIVE SOLID BASED MONTE CARLO CALCULATION GEOMETRY	Dong Wang	Institute of Nuclear Energy Safety Technology, CAS - FDS Team	1105335
11:20	Developments and Applications of the Geometry Conversion Tool McCad for Monte Carlo Particle Transport Simulation	Lei Lu	Karlsruhe Institute for Technology (KIT)	1106105
11:40	A MEMORY EFFICIENT ALGORITHM FOR CLASSIFYING UNIQUE REGIONS IN CONSTRUCTIVE SOLID GEOMETRIES	Derek M Lax	Massachusetts Institute of Technology	1106231

## October 2 (Thu.) 13:30-15:40

### 1-12. Reactor Analysis Method (Mizuho\_A)

Session Chair : Dimitrios Cokinos(BNL), Rong-Jiun Sheu(Institute of Nuclear Engineering and Science)

13:30	THE ROLE OF THE EIGENVALUE SEPARATION IN REACTOR DYNAMICS AND NEUTRON NOISE THEORY	Imre Pazsit	Chalmers University of Technology	1106213
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13:50	INVESTIGATION OF CONDITIONAL TRANSPORT UPDATE IN METHOD OF CHARACTERISTICS BASED COARSE MESH FINITE DIFFERENCE TRANSIENT CALCULATION	Yeon Sang Jung	Seoul National University	1106109
14:10	IMPLEMENTATION OF AN A PRIORI TIME STEP ESTIMATOR FOR THE MULTIGROUP NEUTRON DIFFUSION EQUATION IN ASYNCHRONOUSLY COUPLED RELAP5-3D	Michael Wayne Hackemack	Texas A&M University	1127681
14:30	DEVELOPMENT OF A THREE-DIMENSIONAL KINETICS CODE FOR COMMERCIAL-SCALE FBR FULL CORE ANALYSIS	Yoichiro Shimazu	University of Fukui Research Institute of Nuclear Engineering	1081523
14:50	USE OF ADJOINT FUNCTIONS FOR COMPARING MEASURED AND CALCULATED PARAMETERS IN THE SUBCRITICAL SYSTEMS	Sergey Shevchenko	SEC NRS	1091810
15:10	DEVELOPMENT OF THE NEUTRON SOURCE EVALUATION METHOD AND PREDICTOR OF SRM/SRNM COUNT RATE IN BWR SIMULATOR	Masayuki Tojo	Global Nuclear Fuel-Japan	1097414

#### 14. Education in Reactor Physics (Mizuho\_B)

Session Chair : Ben Forget(MIT), Takanori Kameyama(Tokai Univ.)

13:30	Education programs for students and graduate students with experimental facilities for nuclear energy in Toshiba	Kouji Hiraiwa	TOSHIBA Corporation	2000003
13:50	Past, Present and Future of MIT Reactor Physics	Benoit Forget	Massachusetts Institute of Technology	1105147
14:10	NEW PRACTICAL EXERCISES AT THE JSI TRIGA MARK II REACTOR	Luka Snoj	Jozef Stefan Institute	1106257
14:30	Developing a course in nuclear reactor modelling and going from campus-based to web-based teaching	Christophe R. Demaziere	Chalmers University of Technology	1099675
14:50	Introduction to the status of Reactor physics Education in Tsinghua University	ganglin yu	Tsinghua University	1106245
15:10	Reactor Physics Education at Seoul National University	Han Gyu Joo	Seoul National University	1127896

#### 7-3. Reactor Concepts and Designs (Hiei)

Session Chair : Liangzhi Cao(Xi'an Jiaotong U.), Naoto Aizawa(Tohoku Univ.)

13:30	DEVELOPMENT OF THE 900 SECOND SPECIFIC IMPULSE CARBIDE LOW ENRICHED URANIUM NUCLEAR THERMAL ROCKET	Paolo Francesco Venneri	Korea Advanced Institute of Science and Technology	1126817
13:50	Molybdenum-99 Production in the Oregon State TRIGA Reactor: Analysis of Multiple Smaller Core Designs Using a New LEU Target as Fuel	Andrew J Hummel	Oregon State University	1106761
14:10	Preliminary Design of the Delft Isotope Production Reactor (DIPR)	Jan Leen Kloosterman	Delft University of Technology	1104016
14:30	A STUDY OF SAFETY CORE DESIGN ON BEAM TRANSIENT FOR ACCELERATOR DRIVEN SYSTEM	Naoto Aizawa	Tohoku University	1105750
14:50	NEW INVERTED HYDRIDE FUEL DESIGN CONCEPT FOR PRESSURE TUBE TYPE SUPER CRITICAL WATER REACTORS	Liangzhi Cao	Xi'an Jiaotong University	1080898
15:10	Preliminary safety analysis of a Thorium Breeder Pebble Bed Reactor	Frank Jozef Wols	Delft University of Technology	1069253

#### 6-4. Reactor Physics Experiments (Atago)

Session Chair : Mohamed Ouisloumen(WH), Toru Yamamoto(NRA)

13:30	Overview of the 2014 Edition of the International Handbook of Evaluated Reactor Physics Benchmark Experiments (IRPhEP Handbook)	John Darrell Bess	Idaho National Laboratory	1102703
13:50	Analysis of Tungsten Gray Rods Critical Experiments Using PARAGON with Ultra-Fine Energy Mesh Methodology	Mohamed Ouisloumen	Westinghouse Electric Company LLC	1101855
14:10	Monte Carlo assessment of spatial and energy effects in the VENUS-F subcritical configurations and application for reactivity determination	Vicente Becares	CIEMAT	1127823
14:30	VALIDATION OF ORIGEN2 COUPLED WITH JENDL-4.0 BASE LIBRARIES FOR ISOTOPIC COMPOSITIONS OF IRRADIATED LIGHT WATER REACTOR FUELS	Toru Yamamoto	Nuclear Regulation Authority	1103841
14:50	THE AMMON EXPERIMENT IN EOLE FACILITY: A CHALLENGING PROGRAM DEDICATED TO THE EXPERIMENTAL VALIDATION OF JHR NEUTRONIC AND PHOTONIC CALCULATION TOOLS	Jacques DI SALVO	CEA, DEN, DER/SPEX, Cadarache	1099684
15:10	Monte Carlo analysis of reactivity effect measurements in the AMMON experimental program dedicated to JHR neutron studies	Claire Vaglio-Gaudard	CEA - Commissariat a l'Energie Atomique et aux Energies Alternatives	1101619

#### 10-2. Nuclear Data (Cosmos)

Session Chair : Nicolas E. Stauff (ANL), Pascal Archier (CEA)

13:30	Impact of the interpolation mode on the secondary particles for shielding and criticality benchmarks with TRIPOLI-4 Monte Carlo Code	cedric Jouanne	CEA Saclay	1104046
13:50	Impact of the differences in nuclear data on estimated k-effective of SFR cores	Nicolas Emile Stauff	Argonne National Laboratory	1104107
14:10	NUCLEAR DATA SENSITIVITY ANALYSIS FOR ISOTOPIC GENERATION USING JENDL-4.0, ENDF/B-VII.1 AND JEFF-3.1.1	Yosuke Kawamoto	Nuclear Reactor Engineering Laboratory	1105258
14:30	VALIDATION OF A POINTWISE ENERGY NEUTRON CROSS SECTION LIBRARY GENERATED BY RXSP-BETA2.0 USING ENDFB-VII.0	Jiankai YU	Department of Engineering Physics, Tsinghua University	1102714
14:50	CRITICALITY ANALYSES OF URANIUM ZIRCONIUM CARBON NITRIDE LEU FUEL WITH ENDF/B-VII.1, JEFF-3.1.2, AND JENDL-4 NUCLEAR DATA FILES	Alberto Talamo	Argonne National Laboratory	1068258
15:10	FEEDBACK ON 239PU AND 240PU NUCLEAR DATA AND ASSOCIATED COVARIANCES THROUGH THE CERES INTEGRAL EXPERIMENTS	Pierre LECONTE	CEA Cadarache	1104041