

Tuesday, October 13, 2015

17:30 - 19:00	Registration
19:00 - 20:00	Welcome session <ol style="list-style-type: none">1. Dr. Wesley Hines (UTK) - <i>Welcome on behalf of UTK</i>2. Jaakko Leppänen (VTT) - <i>Greetings from Serpent developer team</i>

Wednesday, October 14, 2015

9:00 - 9:30	Coffee
9:30 - 12:00	Technical session <ol style="list-style-type: none">1. Tuomas Viitanen (VTT) - <i>Temperature treatment capabilities in Serpent 2</i>2. Ville Valtavirta (VTT) - <i>Current Status and Applications of the Multi-physics Capabilities in Serpent 2</i>3. Mohammad Hessian (Aachen University) - <i>Delayed Neutron Treatment in Dynamic Mode of Serpent 2</i>4. Dirceu da Cruz (NRG) - <i>Uncertainty on Reactivity for an MTR Fuel Element due to Nuclear Data Uncertainties</i>5. Manuele Aufiero (UC Berkeley) - <i>Implementation of new adjoint-based methods for sensitivity analysis and uncertainty quantification in Serpent</i>
12:00 - 13:10	Lunch
13:10 - 15:10	Technical session <ol style="list-style-type: none">1. Daniel Wooten (UC Berkeley) - <i>Continuous and discreet composition, redox, and reactivity control in Serpent 2</i>2. Aarno Isotalo (ORNL) - <i>New Capabilities for the Chebyshev Rational Approximation Method (CRAM)</i>3. Emil Fridman (HZDR) - <i>Microscopic depletion with the correction of microscopic cross sections in nodal diffusion code DYN3D</i>4. Toni Kaltiaisenaho (VTT) - <i>Photon transport mode in Serpent 2</i>
15:10 - 15:30	Coffee
15:30 - 17:00	Technical session <ol style="list-style-type: none">1. Jaakko Leppänen (VTT) - <i>New features in Serpent 2 for fusion neutronics</i>2. Paula Siren (VTT) - <i>Generating of fusion plasma neutron source with AFSI for Serpent MC neutronics computing</i>3. Andrew Davis (University of Wisconsin) - <i>Modelling plasma neutron sources in fusion geometries</i>
18:00 - 21:00	Dinner at Calhoun's

Thursday, October 15, 2015

9:00 - 9:30	Coffee
9:30 - 12:00	Technical session <ol style="list-style-type: none">1. Riku Tuominen (VTT) - <i>Coupling Serpent and OpenFOAM</i>2. Ville Valtavirta (VTT) / Miriam Knebel (Juelich) - <i>Monte Carlo neutron transport and thermal-hydraulic simulations using Serpent 2 / SUBCHANFLOW</i>3. Ville Valtavirta (VTT) / Miriam Knebel (Juelich) - <i>Validation of Serpent 2-DYNSUB tool chain using the Special Power Excursion Reactor Test III (SPERT III)</i>4. Emil Fridman (HZDR) - <i>On the use of the SPH method in nodal diffusion analyses of SFRs</i>5. Emil Fridman (HZDR) - <i>Modeling of thermal expansion effects in SFRs with Serpent/DYN3D</i>
12:00 - 13:10	Lunch
13:10 - 17:20	Technical visit to ORNL <ul style="list-style-type: none">• Bus transportation to ORNL• Tour at the X-10 reactor• Bus transportation back to Knoxville

Friday, October 16, 2015

9:00 - 9:30	Coffee
9:30 - 12:00	Technical session <ol style="list-style-type: none"> 1. Kyle Ramey (Georgia Tech.) - <i>Establishing a Serpent Model for I²S-LWR First Core Analysis</i> 2. Diego Ferraro (INVAP) - <i>OPAL Reactor Full 3-D Calculations including refueling</i> 3. Andrew Hall (University of Michigan) - <i>Homogenization Methods for Full Core Solution of the Pn Transport Equations with 3-D Cross Sections</i> 4. Emil Fridman (HZDR) - <i>Few-group XS generation for SFRs: lattice approach vs. full core approach</i> 5. Juan-Luis Franco (National Autonomous University of Mexico) - <i>Serpent utilization in Mexico</i>
12:00 - 13:10	Lunch
13:10 - 15:10	Technical session: <ol style="list-style-type: none"> 1. Emil Fridman (HZDR) - <i>Modeling of critical FREYA experiments with Serpent</i> 2. Ondrej Novak (UTK) - <i>VVER benchmark analysis using Serpent 2</i> 3. Cole Gentry (UTK) - <i>AHTR fuel optimization with Serpent</i> 4. Tomas Chrebet (VUJE) - <i>Research of the safety concept and systems design of the Generation IV reactor ALLEGRO</i> 5. Tomas Chrebet (VUJE) - <i>Research of reactivity control system of reactor ALLEGRO</i> 6. Tomas Chrebet (VUJE) - <i>Criticality analysis of ALLEGRO Fuel Assemblies Configurations</i>
15:10 - 15:30	Coffee
15:30 - 16:30	Technical session, Open Discussion, etc.
16:30 - 17:00	Farewell