<table>
<thead>
<tr>
<th>Session 1</th>
<th>Fuel Applications 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Session Co Chairs: R. Brewster (WEC, USA)</td>
</tr>
<tr>
<td></td>
<td>10:30 a.m. - 12:15 p.m. – Wong Auditorium</td>
</tr>
<tr>
<td>Presentation:</td>
<td>1.1</td>
</tr>
<tr>
<td>Authors:</td>
<td>M. Bruschewski, D. Freudenhammer, M.H.A. Piro, C. Tropea and S. Grundmann</td>
</tr>
<tr>
<td>Presentation:</td>
<td>1.2</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>Demonstration of Advanced Hydraulic Benchmark Data for PWR Mixing Vane Grid</td>
</tr>
<tr>
<td>Authors:</td>
<td>M. E. Conner, C. E. Estrada Perez, E. Dominguez-Ontiveros and Y. Hassan</td>
</tr>
<tr>
<td>Presentation:</td>
<td>1.3</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>CFD Simulation of Flow Mixing and Heat Transfer in 4x4 Rod Bundle with Twist-Vane Grid</td>
</tr>
<tr>
<td>Presentation:</td>
<td>1.4</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>Experimental and Computational Investigations of Flow By-Pass in a 37-Element CANDU Fuel Bundle in a Crept Pressure Tube</td>
</tr>
<tr>
<td>Authors:</td>
<td>M. H. A. Piro, F. Wassermann, M. Bruschweski, D. Fruedenhammer, S. Grundmann, S.J. Kim, M. Christon, M. Berndt, C. Azih and C. Tropea</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 2</th>
<th>Containment 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Session Co Chairs: M. Andreani (PSI, Switzerland), E. Laurien (UniStuttgart, Germany)</td>
</tr>
<tr>
<td></td>
<td>10:30 a.m. - 12:15 p.m. – Morss Hall</td>
</tr>
<tr>
<td>Presentation:</td>
<td>2.1</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>Double Blind Simulation Benchmark Based on Initial Operation Test of the Extended THAI+ Facility on Steam Condensation and Light Gas Mixing by Natural Convection</td>
</tr>
<tr>
<td>Authors:</td>
<td>M. Freitag and E. Schmidt</td>
</tr>
<tr>
<td>Presentation:</td>
<td>2.2</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>Blind Simulations of THAI Test TH27 with GASFLOW-MPI for Participation in the International Benchmark Conducted within the German THAI Program</td>
</tr>
<tr>
<td>Authors:</td>
<td>P. Royl, J. Xiao and T. Jordan</td>
</tr>
<tr>
<td>Presentation:</td>
<td>2.3</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>Numerical Simulation of Droplet Flows in the Model Containment THAI</td>
</tr>
<tr>
<td>Authors:</td>
<td>C. Kaltenbach and E. Laurien</td>
</tr>
<tr>
<td>Presentation:</td>
<td>2.4</td>
</tr>
<tr>
<td>Paper Title:</td>
<td>URANS Analysis of the Erosion of a Stably Stratified Layer</td>
</tr>
<tr>
<td>Authors:</td>
<td>L. Ishay, G. Ziskind, U. Biede and A. Rashkovan</td>
</tr>
<tr>
<td>Session 3</td>
<td>Multiphase General 1</td>
</tr>
<tr>
<td>-----------</td>
<td>----------------------</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>2:10 p.m. - 3:30 p.m. – Wong Auditorium</td>
</tr>
<tr>
<td><strong>Paper Title:</strong></td>
<td>Validation of the Baseline Model for Poly-Disperse Bubbly Flows</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>D. Lucas, E. Krepper and R. Rzehak</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>CFD Calculations of Multiphase Flows with a Multifield Approach</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>S. Mimouni, D. Lucas and I. Tiselj</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>Integral and Separate Effect Simulations of Bubbly Flows Using Interface Tracking Approach</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>J. Fang, J. Feng and I. Bolotnov</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Session 4</th>
<th>Plant - PTS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Presentation:</strong></td>
<td>2:10 p.m. - 3:30 p.m. – Morss Hall</td>
</tr>
<tr>
<td><strong>Paper Title:</strong></td>
<td>IAEA CRP Benchmark of ROCOM Boron Dilution and PTS Test Cases for the Use of CFD in Reactor Design</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>T. Höhne and S. Kliem</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>Towards the Benchmarking Direct Numerical Simulations of a Single Phase Pressurized Thermal Shock</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>D. Rosa, A. Shams and E.M.J. Komen</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>Methodology Development of CFD/PFM for PTS Analysis on Nuclear Reactor Safety</td>
</tr>
<tr>
<td><strong>Authors:</strong></td>
<td>J.-X. Kang, P.-C. Huang, Y.-C. Hung, C.-H. Lin, Y.-S. Tseng, Y.-M. Ferng and C.-Y. Shih</td>
</tr>
<tr>
<td>Poster Session 1</td>
<td>Plant and Mixing Applications</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------------------</td>
</tr>
<tr>
<td><strong>Poster</strong></td>
<td><strong>3:30 p.m. - 4:15 p.m. – Morss Hall</strong></td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>ANALYSIS OF THE COLD TRAP CONFIGURATION IN AP1000® USING CFD</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>H. Xu, R.F. Wright</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.1</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>NEPTUNE_CFD VALIDATION FOR PRESSURIZED THERMAL SHOCK (PTS) APPLICATIONS ON TOPFLOW-PTS STEADY-STATE STEAM-WATER EXPERIMENTAL TESTS WITH DIFFERENT WATER LEVELS IN THE COLD LEG</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>J. Roy, C. Heib</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.2</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>COMPUTATIONAL STUDY OF THE SAFETY INJECTION TANK PERFORMANCE</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>J.O. Cho, J. I. Lee, Y. Addad, Y. S. Nietiadi, Y. S. Bang, S. H. Yoo</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.3</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>ANSYS CFX SIMULATION OF T-JUNCTION MIXING PHENOMENA AND VALIDATION AGAINST VATTENFALL EXPERIMENT RESULTS</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>M. Aghazarian, A. Nalbandyan, Ts. Malakyan, A. Amirjanyan</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.4</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>DEVELOPMENT OF UNSTRUCTURED MESH-BASED NUMERICAL METHOD FOR SODIUM-WATER REACTION PHENOMENON IN STEAM GENERATORS OF SODIUM-COOLED FAST REACTORS</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>A. Uchibori, A. Watanabe, T. Takata, S. Ohno, H. Ohshima</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.5</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>COMPARISON OF HYDROGEN FLAME ACCELERATION PREDICTIONS USING THE EDDY-DISSIPATION AND THE TURBULENT FLAME CLOSURE</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>Y. Halouane, A. Dehbi</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.6</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>PREDICTION OF THE TEMPERATURE DISTRIBUTION IN A DOUBLE TUBE COUNTER-FLOW HEAT EXCHANGER USING ANSYS CFX</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>A. Papukchiev, M. Scheuerer</td>
</tr>
<tr>
<td><strong>Poster</strong>:</td>
<td>P1.7</td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>OECD-GEMIX Benchmark Special Session</strong></td>
</tr>
<tr>
<td><strong>Poster Title</strong>:</td>
<td><strong>OECD-GEMIX Benchmark Results</strong></td>
</tr>
<tr>
<td><strong>Authors</strong>:</td>
<td>Christopher Boyd (US Nuclear Regulatory Commission)</td>
</tr>
<tr>
<td>Session 5</td>
<td>Boiling 1</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Session Co Chairs:</strong></td>
<td>S. Mimouni (EDF, France), S. Lo (CD-adapco, UK)</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>4:25 p.m. - 5:45 p.m. – Wong Auditorium</td>
</tr>
</tbody>
</table>

| Presentation | 5.1 |
| **Paper Title:** | **Evaluation of Coalescence and Break-Up Kernels of Subcooled Boiling Flows in Vertical Channels** |
| **Authors:** | S. Vahaji, L. Deju, S.C.P. Cheung, J.Y. Tu and Yeoh |
| **Presentation:** | 5.2 |
| **Paper Title:** | **Numerical Simulation of Nucleate Boiling Using Dynamic Models of Microlayer Formation and Evaporation** |
| **Authors:** | A. Guion, J. Buongiorno, S. Zaleski, S. Afkhami and C. Narayanan |
| **Presentation:** | 5.3 |
| **Paper Title:** | **CFD Model for Simulation of Subcooled Nucleate Flow Boiling – Implementation and Validation** |
| **Authors:** | M. Sonntag and X. Cheng |

<table>
<thead>
<tr>
<th>Session 6</th>
<th>Fluid Structure Interaction 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Session Co Chairs:</strong></td>
<td>K. Miyoshi (INSS, Japan), T. Hoehne (HZDR, Germany)</td>
</tr>
<tr>
<td><strong>Presentation:</strong></td>
<td>4:25 p.m. - 5:45 p.m. – Morss Hall</td>
</tr>
</tbody>
</table>

| Presentation | 6.1 |
| **Paper Title:** | **Investigation of Cross-Flow Induced Vibrations in a Normal Square Tube Array by Means of Large-Eddy Simulations for Tube Damage Risk Assessment** |
| **Authors:** | J. Berland, E. Deri, A. Adobes |
| **Presentation:** | 6.2 |
| **Paper Title:** | **Numerical Prediction of Flow Induced Vibrations for Safety in Nuclear Reactor Applications** |
| **Authors:** | E. ter Hofstede, S. Kottapalli and A. Shams |
| **Presentation:** | 6.3 |
| **Paper Title:** | **Validation of Beam Vibration Simulations in Axial Flow** |
| **Authors:** | R.A. Brewster and Y. Aleshin |