For those wishing to participate in the meeting remotely, please go to the meeting’s EVO URL: 
http://evo.caltech.edu/evoNext/koala.jnlp?meeting=eueeneevivaatavI8aBlu

All talks will be in A114, Physics/Astronomy Bldg, across the Plaza

**Monday, June 27**  
**AMR/MultiGrid**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00-8:50</td>
<td>Check-In, Room C411, Physics/Astronomy Tower</td>
</tr>
<tr>
<td>8:50-9:00</td>
<td>INT Welcome, David Kaplan and participant introductions</td>
</tr>
</tbody>
</table>

I. **Session Chair: Pavlos Vranas**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00-9:30</td>
<td>Juan Meza, Lawrence Berkeley National Laboratory</td>
<td>“Domain Science/AM/CS: Exascale Partnerships”</td>
</tr>
<tr>
<td>9:30-10:20</td>
<td>John Bell, Lawrence Berkeley National Laboratory</td>
<td>“AMR Applications in Astrophysics”</td>
</tr>
<tr>
<td>10:20-10:40</td>
<td></td>
<td>Coffee Break</td>
</tr>
<tr>
<td>10:40-11:30</td>
<td>Rich Brower, Boston University</td>
<td>“MultiGrid Methods in Lattice QCD”</td>
</tr>
<tr>
<td>11:30-12:20</td>
<td>Cal Jordan, University of Chicago</td>
<td>“The Flash Code: From Astrophysics to NIF”</td>
</tr>
<tr>
<td>12:20-2:00</td>
<td></td>
<td>Lunch</td>
</tr>
</tbody>
</table>

II. **Session Chair: Juan Meza**

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00-2:50</td>
<td>Martin Berzins, University of Utah</td>
<td>“Scalable Adaptive Meshing Uintah Framework”</td>
</tr>
<tr>
<td>2:50-3:40</td>
<td>Rob Falgout, Lawrence Livermore National Laboratory</td>
<td>“Multi-Grid Methods”</td>
</tr>
<tr>
<td>3:40-4:10</td>
<td></td>
<td>Coffee Break</td>
</tr>
<tr>
<td>4:10-5:00</td>
<td>Aurel Bulgac, University of Washington</td>
<td>“Real-Time Dynamics of Fermionic Superfluid Systems: from Deterministic Petascale to Stochastic Exascale Simulations”</td>
</tr>
</tbody>
</table>
Tuesday, June 28  Solving Algebraic Systems
I.  Session Chair:  Esmond Ng
9:00-9:50  Pieter Maris, Iowa State University
   “Computational Issues in ab initio Nuclear Structure”
9:50-10:40  Chao Yang, Lawrence Berkeley National Laboratory
   “Eigenvalue Calculations”
10:40-11:10  Coffee Break
11:10-12:00  Mike Heroux, Sandia National Laboratories
   “Building the Next Generation of Parallel Applications and Libraries”
12:00-2:00  Lunch
II.  Session Chair:  Martin Savage
2:00-2:50  Carol Woodward, Lawrence Livermore National Laboratory
   “Nonlinear Solvers”
2:50-3:40  Tony Mezzacappa, Oak Ridge National Laboratory
   “Supernova Simulations”
3:40-4:10  Coffee Break
4:10-5:00  Pavlos Vranas, Lawrence Livermore National Laboratory
   “Lattice QCD on BlueGene”
5:00-5:50  Kostas Orginos, College of William & Mary and Jefferson Laboratory
   “Algorithm Developments for Nuclear LQCD”

Wednesday, June 29  Performance/Monte Carlo
I.  Session Chair:  Stefan Wild
9:00-9:50  Martin Schulz, Lawrence Livermore National Laboratory
   “Performance and Optimization: A Case for more Modular and Intuitive Tools”
9:50-10:40  Richard Graham, Oak Ridge National Laboratory
   “Preparing Applications for Ultrascale Computing: A Tools Perspective”
10:40-11:10  Coffee Break
11:10-12:00  David Bailey, Lawrence Berkeley National Laboratory
   “Performance Tuning of Scientific Applications”
12:00-2:00  Lunch
II.  Session Chair:  Tony Mezzacappa
2:00-2:50  Alexandre Chorin/Jakub Kominiarczuk, UC Berkeley
   “Chainless Monte Carlo”
2:50-3:40  Dan Kasen, UC Berkeley and Lawrence Berkeley National Laboratory
   “Monte Carlo Radiative Transfer in Astrophysics”
3:40-4:10  Coffee Break
Thursday, June 30  Architectures/Programming Languages/GPUS
I.  Session Chair: Joe Carlson
9:00-9:50  John Shalf, Lawrence Berkeley National Laboratory
 "Advanced Architectures"
9:50-10:40  Jeffrey Vetter, Oak Ridge National Laboratory
 "Large-scale Heterogeneous Computing"
10:40-11:10  Coffee Break
11:10-12:00  Brad Chamberlain, Cray/University of Washington
 "Programming Models and Chapel"
12:00-2:00  Lunch
II.  Session Chair: Huey-Wen Lin
2:00-2:50  Randy LeVeque, University of Washington
 "Reproducible Research"
2:50-3:40  Tom Quinn, University of Washington
 "N-Body Simulations on GPU Clusters"
3:40-4:10  Coffee
4:10-5:00  Balint Joo, Jefferson Laboratory
 "Lattice QCD on GPU Clusters"

Friday, July 1
I.  Session Chair: Bruce Barrett
9:00-9:50  Hank Childs, Lawrence Berkeley National Laboratory
 "Visualization"
9:50-10:40  Bronson Messer, Oak Ridge National Laboratory
 "Producing Science at the Top of the Top 500: The Challenges of Extreme
 Scalability and Hybrid-Multicore Computing"
10:40-11:10  Coffee Break
11:10-12:00  Peter Nugent, Lawrence Berkeley National Laboratory
 "Astrophysical Surveys: Visualization/Data Management"
12:00-2:00  Lunch
II.  Session Chair: Wick Haxton
2:00-2:50  Bob Rosner, University of Chicago
 "Outlook: Exascale Computing and Science"