

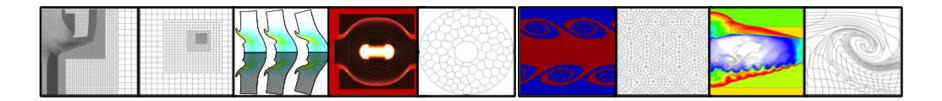
## Monday 2013/09/02

| Widhay 2019/05/02  |  |  |  |  |
|--|--|--|--|--|
| Time   | Speaker                                | Title  |  |  |
| 8:30 - 9:00<br>9:00 - 9:30   | Barlow                                 | Opening/Intro A high order cell centred Lagrangian Godunov scheme for elastoplastic flow   |  |  |
| 9:30-10:00   | Rider                                  | Revisiting Numerical Advection and Remap Algorithms  |  |  |
| 10:00 - 10:30  | Coffee Break                           |  |  |  |
| 10:30 - 11:00 $11:00 - 11:30$ $11:30 - 12:00$ $12:00 - 12:30$                                      | Menshov<br>Burton<br>Kenamond<br>Breil | Some Aspects of Numerical Modeling in Heterogeneous Mechanics An intersection based ALE scheme (xALE) for cell centered hydrodynamics Exact intersection remapping of multi-material domain decomposed polygonal meshes A swept-intersection-based remapping method for axisymmetric ReALE computation |  |  |
| 12:30 - 14:00  | Lunch                                  |  |  |  |
| 14:00 - 14:30 $14:30 - 15:00$ $15:00 - 15:30$  | Waltz<br>Carnes<br>Morgan              | Operator splitting and time accuracy in Lagrange plus remap methods A Stable and Accurate Method for Tetrahedral Elastic-Plastic Computations A Godunov-like point-centered Lagrangian hydrodynamic approach   |  |  |
| 15:30 - 16:00  |  | Coffee Break   |  |  |
| $   \begin{array}{c c}     16:00 - 16:30 \\     16:30 - 17:00 \\     17:00 - 17:30   \end{array} $ | Mattson<br>Mosso<br>Vachal             | Artificial Viscosity: Back to Basics Extending van Leers Algorithm to Multiple Dimensions A Symmetry Preserving Dissipative Artificial Viscosity in r-z Geometry   |  |  |
| 19:00 - 21:00  |  | Reception  |  |  |









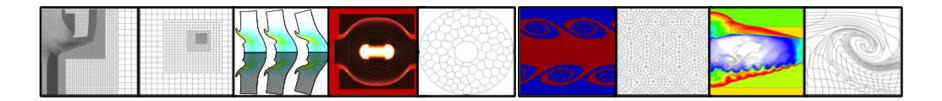
## Tuesday 2013/09/03

| 1ucsday 2019/09/09 |           |   |  |  |
|--------------------|-----------|---|--|--|
| Time               | Speaker   | Title   |  |  |
| 8:30 - 9:00        | Vilar     | High-order Discontinuous Galerkin method for two-dimensional gas dynamics equations written using |  |  |
|                    |           | a total Lagrangian formalism on general unstructured Bezier grids                                 |  |  |
| 9:00 - 9:30        | Kolev     | High-Order Discontinuous Galerkin Remap Methods for Curvilinear ALE Hydrodynamics                 |  |  |
| 9:30 - 10:00       | Boscheri  | High Order Arbitrary-Lagrangian-Eulerian One-Step WENO Finite Volume Schemes on Unstruc-          |  |  |
|                    |           | tured Meshes  |  |  |
| 10:00 - 10:30      |           | Coffee Break  |  |  |
| 10:30 - 11:00      | Lew       | Universal meshes: high-order simulation of problems with evolving geometries                      |  |  |
| 11:00 - 11:30      | Schilling | New Developments in Multicomponent Reynolds Averaged Navier Stokes Modeling of Reshocked          |  |  |
|                    |           | Richtmyer Meshkov Instability and Turbulent Mixing  |  |  |
| 11:30 - 12:00      | Mathiaud  | Some improvements in the understanding of the k-omega model for supersonic re-entry               |  |  |
| 12:00 - 12:30      | Morel     | Radiative Shock Solutions with Grey- $S_N$ -Transport   |  |  |
| 12:30 - 14:00      |           | Lunch   |  |  |
| 14:00 - 14:30      | Clair     | Contact algorithms for cell-centered lagrangian schemes   |  |  |
| 14:30 - 15:00      | Del Pino  | A conservative slide line method for cell-centered semi-lagrangian and ALE schemes in 2D          |  |  |
| 15:00 - 15:30      | Vitali    | Contact with friction for the eXtended Eulerian Method  |  |  |
| 15:30 - 16:00      |           | Coffee Break  |  |  |
| 16:00 - 16:30      | Loubère   | High-order remapping using MOOD paradigms   |  |  |
| 16:30 - 17:00      | Diot      | Extension of the MOOD method to multi-material compressible flows                                 |  |  |
| 17:00 - 17:30      | Hoch      | Local convex-Hull preserving second-order extension for cell-centered ALE schemes                 |  |  |
|                    |           |   |  |  |









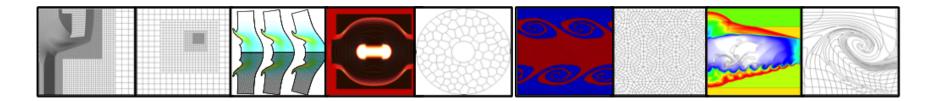
## Wednesday 2013/09/04

| Time          | Speaker    | Title   |  |  |
|---------------|------------|---|--|--|
| 9:00 - 9:30   | Lung       | Toward a Vorticity Preserving Lagrangian Scheme   |  |  |
| 9:30-10:00    | Chiravalle | An hourglass control method for three dimensional lagrangian hydrodynamics                        |  |  |
| 10:00 - 10:30 |            | Coffee Break  |  |  |
| 10:30 - 11:00 | Shashkov   | Interface aware sub-scale dynamics closure model for multimaterial ALE methods                    |  |  |
| 11:00 - 11:30 | Francois   | Pressure Relaxation for Single Velocity Multimaterial Flow Model                                  |  |  |
| 11:30 - 12:00 | Kramer     | Automatic Ordering for Volume-of-Fluid Interface Reconstruction in Multi-material Elements        |  |  |
| 12:00 - 12:30 | Anderson   | Multi-material Zone Treatments in an ALE-AMR Hydrocode  |  |  |
| 12:30 - 14:00 |            | Lunch   |  |  |
| 14:00 - 14:30 | Barton     | Low numerical dissipation Eulerian cut-cell method for coupled compressible solid/turbulent-fluid |  |  |
|               |            | problems  |  |  |
| 14:30 - 15:00 | Wohlbier   | Programming for Modern Architectures in the CHICOMA Hydrocode                                     |  |  |
| 15:00 - 15:30 | Fung       | Considerations for computational performance of algorithms for hydrocodes on advanced architec-   |  |  |
|               |            | tures   |  |  |
| 15:30 - 17:30 |            | Posters   |  |  |
|               |            |   |  |  |









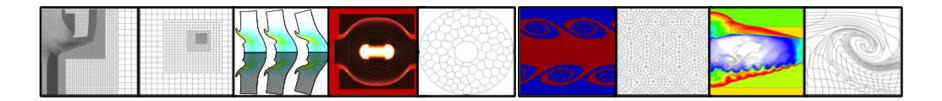
# Thursday 2013/09/05

| Time                       | Speaker    | Title  |  |  |
|----------------------------|------------|--|--|--|
| 9:00 - 9:30                | Claisse    | A compatible energy-preserving entropic modification of Lagrangian time- and space-staggered hy-   |  |  |
|                            |            | drodynamic schemes   |  |  |
| 9:30 - 10:00               | Robinson   | Representation and Propagation of Uncertainty for Tabular Multiphase Equation-of-State Models      |  |  |
| 10:00 - 10:30              |            | Coffee Break   |  |  |
| 10:30 - 11:00              | Maire      | A Simple Elasticity Model at Large Deformations and its Compatible Discretization for both Refer-  |  |  |
|                            |            | ence and Deformed Configurations   |  |  |
| 11:00 - 11:30              | Schofield  | Remap of material damage and failure in unstructured ALE calculations                              |  |  |
| 11:30 - 12:00              | Ghidaglia  | Simulation of Blast Wave Attenuation by Aqueous Foams  |  |  |
| 12:00 - 12:30              | Canfield   | Simulation of multi-material flows using a finite element Riemann solver and adaptive unstructured |  |  |
|                            |            | grids  |  |  |
| 12:30 - 14:00              |            | Lunch  |  |  |
| $\overline{14:00 - 14:30}$ | Fochesato  | Surviving to filaments and fragments in a VOF hydrodynamics simulation code                        |  |  |
| 14:30 - 15:00              | Во         | Reconnection-based Arbitrary-Lagrangian-Eulerian (ReALE) Method with Adaptive Mesh Refine-         |  |  |
|                            |            | ment and Coarsening  |  |  |
| 15:00 - 15:30              | Starinshak | Parallel ReALE Calculations of Large-Scale, Multimaterial Problems                                 |  |  |
| 15:30 - 16:00              |            | Coffee Break   |  |  |
| 16:00 - 16:30              | Voth       | An eXtended Finite Element/Arbitrary Lagrangian Eulerian (XFEM/ALE) approach for multi-            |  |  |
|                            |            | material mechanics   |  |  |
| 16:30 - 17:00              | Rebourcet  | Stability of collocated finite volume schemes for Lagrangian hydrodynamics                         |  |  |
| 17:00 - 17:30              | Johansen   | An Adaptive Embedded Boundary Discretization for Multimaterial Simulation                          |  |  |
| $\overline{19:00 - 21:00}$ |            | Banquet  |  |  |
| 13.00 21.00                |            |  |  |  |









# Friday 2013/09/06

|               | U            |  |  |  |  |
|---------------|--------------|--|--|--|--|
| Time          | Speaker      | Title  |  |  |  |
| 9:00 - 9:30   | Dawes        | Multi-material polygon based finite volume method for diffusion                  |  |  |  |
| 9:30 - 10:00  | Dai          | High order diffusion solvers for three-dimensional material mixing               |  |  |  |
| 10:00 - 10:30 | Coffee Break |  |  |  |  |
| 10:30 - 11:00 | McClarren    | Self-similar radiation-hydrodynamics solutions in the high energy density regime |  |  |  |
| 11:00 - 11:30 | Harrison     | New capabilities for modeling creation and breakup of ejecta in the FLAG code    |  |  |  |
| 11:30 - 12:00 | Owen         | Smoothed Voronoi Particle Hydrodynamics: a new meshless method                   |  |  |  |
| 12:00 - 12:30 |              | Closing  |  |  |  |
| 12:30         |              | Close  |  |  |  |
|               |              |  |  |  |  |





