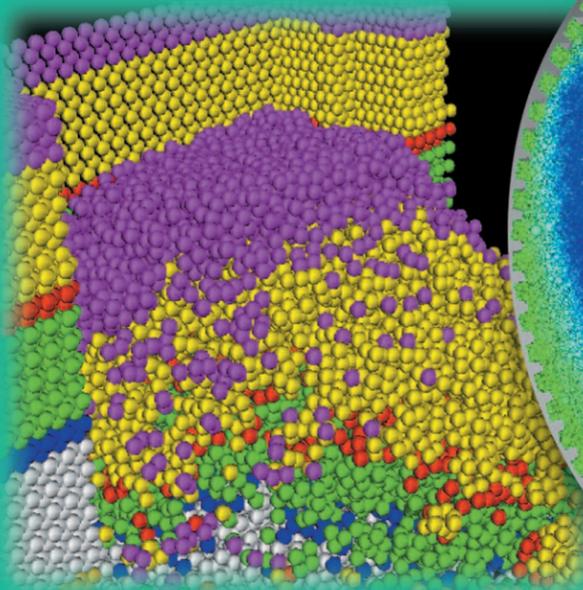


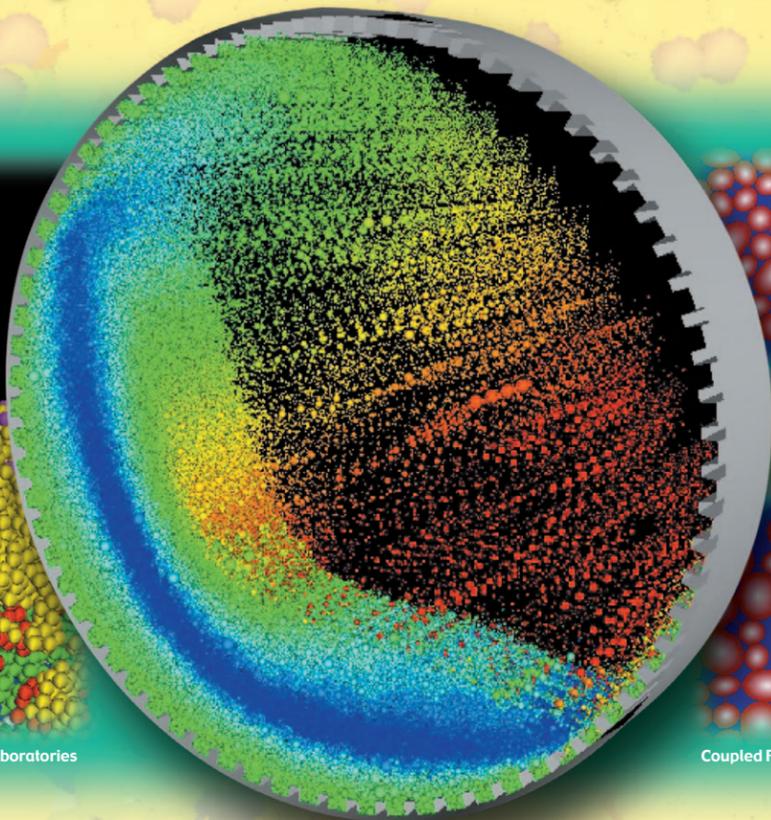
3rd International Conference on Discrete Element Methods

www.sandia.gov/dem

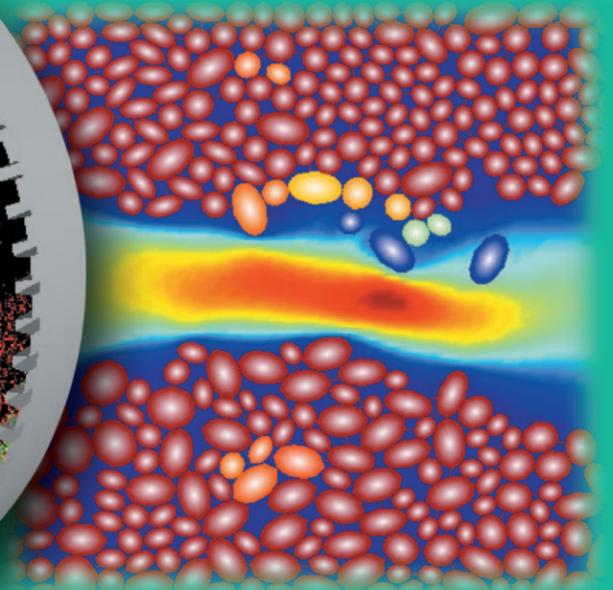
Santa Fe, New Mexico, USA
September 23 - 25, 2002



Bench Blast Simulation by Dale Preece, Sandia National Laboratories

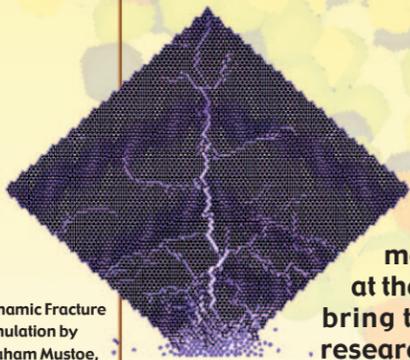


Grinding Mill Simulation by Paul Cleary, CSIRO



Coupled Fluid-DEM Simulation by Ben Cook, Sandia National Laboratories

Numerical Modeling of Discontinua



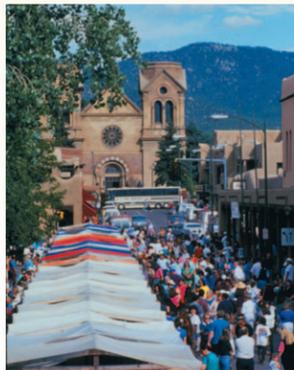
Dynamic Fracture Simulation by Graham Mustoe, Colorado School of Mines

Discrete element methods (DEM) include a suite of numerical techniques developed over the past 25 years to model granular materials, rock, and other discontinua at the grain scale. This conference will bring together a diverse group of researchers and practitioners to discuss

new DEM modeling approaches and applications. For more information, please visit the conference web site at www.sandia.gov/dem, or contact the organizers at dem@sandia.gov.

CONFERENCE LOCATION

The conference will be held at the La Fonda Hotel in Santa Fe, New Mexico USA. La Fonda is a unique pueblo style hotel located on the historic Plaza in Santa Fe.



Santa Fe is an enchanting and culturally rich city located at the base of the Sangre de Cristo Mountains in northern New Mexico.

CONFERENCE TOPICS

PARTICLE MODELS

- bond representations for cementation and cohesion
- brittle and highly deformable elements
- contact modeling

NUMERICAL TECHNIQUES

- mathematical theory
- contact detection algorithms
- parallelization methods

COUPLED METHODS

- coupled continuum and discontinuum methods
- coupled multiphase methods

EXPERIMENTAL VALIDATION

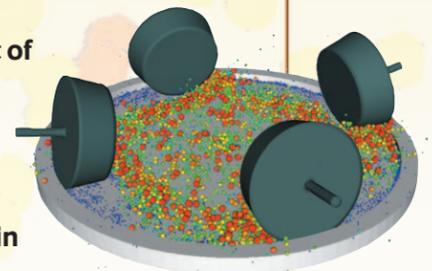
- characterization and measurement of material properties
- relationship between particulate and bulk material properties

APPLICATIONS

- large-scale industrial applications in material processing, geotechnical, mining, or petroleum engineering
- fundamental investigations (e.g., granular flows)

CODE DESIGN AND DATA ANALYSIS

- program architecture
- visualization



Comminution Simulation by Paul Cleary, CSIRO

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