Integration of Tracks

Dimitri Gidaspow
Illinois Institute of Technology

SUMMMARY OF TRACK PRESENTATIONS

	Track 1 Dense Gas-Solid and Granular Flows	Track 2 Dilute Gas - Solid flows	Track 3 Liquid-Solids /Gas-liquid Flows	Track 4 Computational Physics and Application
Theory	- Scaling Laws - Cohesion - Boundary conditions - Granular temperature? - Lasting contacts - Fluctuation dissipation - Reaction	- Drag laws over entire range - Particle size distribution - Non-spherical particles - Electrostatics	- High Reynolds number multiphase turbulent flow DNS or LES - Effective bubble diameter (not predictive theory) - Flow regimes	- Micro-Meso-Macro (See track 4 table) - How to handle large amounts of data?
Experiment	- Inclined flow - bunpy bed vs. Flat - Mixer - agglomerator - What small scale experiments?	- Well - characterized experimet needed - Non-intrusive diagnostics	- Fluctuations & Reynolds stresses	X
CFD	- DEM - Continuum Modelling : Lagrangian-Eulerian Eulerian-Eulerian	- Clustering - Boundary conditions: Exit & Backflow - Kinetic theory - Coarse grid - High Pressure '& High Temperature - Internals - Reactive flows: Reaction drives flow	- Grid dependence	- Visualization - Integration with Aspen - Parallel Processing? Moores' law - One code? - Open source code - Graduate students