Program
CFDEM®conference 2017

Thursday , 14. September 2017

Room 'Donau'	Room 'Traun'	Room 'Enns'	Room 'Inn'
COFFEE & REGISTRATION **08:30-09:00**			
09:00 Welcome			
Stefan Radl (TU Graz) Closures for Mesco-scale Models of Dense Suspensions: The Euler-Lagrange Perspective 09:05-09:40 chair: Goniva, C.			
Martin Schilling (BASF) Digitalization in chemical Industry: Role of DEM and CFDEM 09:40-10:15 chair: Goniva, C.			
Break 10:15-10:30			
Niels Deen (Eindhoven University) CFD-DEM for understanding heat transport in reactive fluidized beds 10:30-11:05 chair: Kloss C.			
Prashant Gupta (Procter & Gamble) How useful is DEM for understanding industrial scale bulk solid handling problems: A critical appreciation 11:05-11:40 chair: Kloss, C.			
Sideroff & Stephens (Applied CCM) 11:40-12:00 chair: Kloss, C.			
Lunch Break 12:00-13:00			
CA* **Finke B.**, 13:00-13:20 Novel method for the estimation of the suspension viscosity from CFD-DEM simulations	NM* **Mayrhofer A.**, 13:00-13:20 A novel DEM model for cohesive and compressible particles under large deformations	IA* **Grobbel J.**, 13:00-13:20 Modeling of solar particle receiver-reactors with the discrete element method	**Open Source CFD Workshop** 13:00-14:20 chairs: Nagy, J. & Goniva, C. **Sideroff/Stephens** 13:00-13:40 **József Nagy** 13:40-14:10 **Stefan Radl** 14:10-14:20
CA* **Francqui F.**, 13:20-13:40 How GranuTools the instrument range can help to calibrate simulation parameters	NM* **Podlozhnyuk A.**, 13:20-13:40 Superquadric DEM: theory, validation, comparison to multispheres, remaining challenges	IA* **Otto H.**, 13:20-13:40 Validation of Coupled Discrete Element and Multi Body Simulations in Material Handling	
CA* **Do H.**, 13:40-14:00 A calibration framework of DEM variables using genetic algorithms	NM* **Askarishahi M.**, 13:40-14:00 A Voidage Correction Model for Improved Predictions of Hydrodynamics in Unresolved Euler-Lagrange Simulations	IA* **Yu Y.**, 13:40-14:00 LIGGGHTS and EDEM application on charging system of ironmaking blast furnace	
CA* **Rackl M.**, 14:00-14:20 Efficient calibration of material and contact law-related DEM parameters with LIGGGHTS	NM* **Forgber T.**, 14:00-14:20 A Novel Approach to Calculate Radiative Thermal Exchange in Coupled Particle Simulations	IA* **Egger M./Haber A.**, 14:00-14:20 Caking mechanisms during the production process	
Break 14:20-14:35			
Yuntian Feng (University Swansea) Modelling Non-Spherical Particles: A General Contact Framework 14:35-15:10 chair: Schilling, M.			**Open Source CFD Workshop** 14:35-15:45 chair: Radl, S. & Nagy, J. **Thomas Schumacher** 14:35-14:55 **Ardalan Moftakhari** 14:55-15:15 **Khuram Walayat** 15:15-15:25 **Open Discussion** 15:25-15:45
André Katterfeld (Magdeburg University) On the Calibration of DEM Parameters 15:10-15:45 chair: Schilling, M.			
Jungwirth, A., CFDEM Funding 15:45-15:50			
Goniva C. & Kloss C. (DCS Computing) LIGGGHTS® and CFDEM®coupling: recent dvances, remaining challenges and road map 15:50-16:25 chair: Schilling, M.			
Break / drink in foyer / Group Photo 16:25-17:00			
16:50 **1st train to AEC** **17:00 (sharp!) 2nd train to AEC**			
Social event at AEC: Deep Space 17:30-18:00			
Group Photo, Cocktails at AEC 18:00-19:00			
Conference Dinner at AEC / Cubus 19:00:00 - 23:00			

Information on Technical Sessions:

*CA Calibration; chairs: Weiler, R. & Kerbl, J.

*NM Novel Models; chairs: Höfert, M., & Aigner, A.; chairs Friday: Deen, N., Mayrhofer, A.

*IA Industrial Application; chairs: Katterfeld, A., Hager, A.; chairs Friday: Cenni, R. & Hager, A.

*GM Geomechanics; chairs: Feng, Y.T. & Aigner, A.

*PM Pragmatical Models: chairs: Leitz, K.-H. & Goniva, C.

*NSM NanoSim Session Materials Modeling; chairs: Pertl, M. & Mayrhofer A.

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Friday, 15. September 2017

Room 'Donau'	Room 'Traun'	Room 'Enns'
09:00 Welcome		
Riccardo Cenni (SACMI Imola) Shape optimization of an industrial system geometry according to granular behaviour modelled by DEM 09:05-09:40 chair: Sideroff/Stephens		
Karl-Heinz Leitz (Plansee) LIGGGHTS and CFDEMcoupling Simulations in Technology Development for Processing of Refractory Metals 09:40-10:15 chair: Sideroff/Stephens		
Break 10:15-10:30		
Stefan Luding (Twente University) Mechanics of granular media: Experiments, Theory and Modeling: From discrete particles to continuum theory and applications 10:30-11:05 chair: Kloss, C.		
Hendrik Wrenger (The Ocean Cleanup) 11:05-11:20 chair: Kloss. C.		
Pieter Vonk (DSM Chemicals) 11:20-11:40 chair: Kloss, C.		
Plenary Discussion 11:40-12:00		
Lunch Break 12:00-13:00		
IA* **Schrader M.**, 13:00-13:20 CFD-DEM simulation for the estimation of the stress energy distribution acting in a...	NM* **Malinouski A.**, 13:00-13:20 Radiative heat transfer in particle beds for use in DEM	PM* **Pirker S.**, 13:00-13:20 Three strategies to accelerate CFD-DEM simulations
IA* **Janda A.**, 13:20-13:40 Numerical analysis of powder mixing dynamics in a ribbon mixer	NM* **Kazerovskis J.**, 13:20-13:40 Usind CFDEM in a Convergence Study of the Immersed Domain Method with an Outlook to...	PM* **Queteschiner D.**, 13:20-13:40 A multi-level coarse-grain model to speed up CFD-DEM simulations
IA* **Kazemi-Kamyab V.**, 13:40-14:00 Simulation of particulate flows in microchannels	NM* **Aigner A.**, 13:40-14:00 Porous and sponge-like particle behaviour within a rotary drum and spray coating	PM* **Goyal A.**, 13:40-14:00 Smart Strategies For DEM Modeling Of Industrial Processes
IA* **Gómez Vázquez R.**, 14:00-14:20 Lagrangian modelling of laser sources for the simulation of manufacturing processes	NM* **Holzinger G.**, 14:00-14:20 A dual mesh approach for CFD-DEM solvers	PM* **Seil P.**, 14:00-14:20 Towards a Time Extrapolation Scheme for Large-Scale Industrial Processes
Break 14:20-14:35		
IA* **Kerbl, J.**, 14:35-14:55 Automated geometry-variation testing	GM* **Kanitz M.**, 14:35-14:55 Investigations on the stability of submarine sandy slopes – a detailed experimental study	NSM* **Dijksman J.**, 14:35-14:55 Friction destabilizes flow: the role of microscopic particle interactions in dense granular flows
	GM* **Hager A.**, 14:55-15:15 Investigations on the stability of submarine sandy slopes – numerical aspects	NSM* **Sangrós Giménez C.**, 14:55-15:35 Structural and mechanical characterization of lithium-ion battery electrodes via DEM simulations
	GM* **Plenker D.**, 15:15-15:35 Numerical investigations on the failure of soil columns under water with the coupled CFD-DEM	NSM* **Baric V.**, 15:15-15:35 The Simulation of Mechanical Properties of Nanoparticle Layers using DEM
	GM* **Soleimani A.**, 15:35-15:55 Simulation of cohesive soil and bulk solids	NSM* **Guesnet É.**, 15:35-15:55 Nanoporous silica compaction and fracture: discrete simulation of their mechanical behavior
15:55 Conference Award, Closing, Cocktail and Farewell		

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