ERCOFTAC Best Practice Guidance
CFD for Dispersed Multi-Phase Flows Text

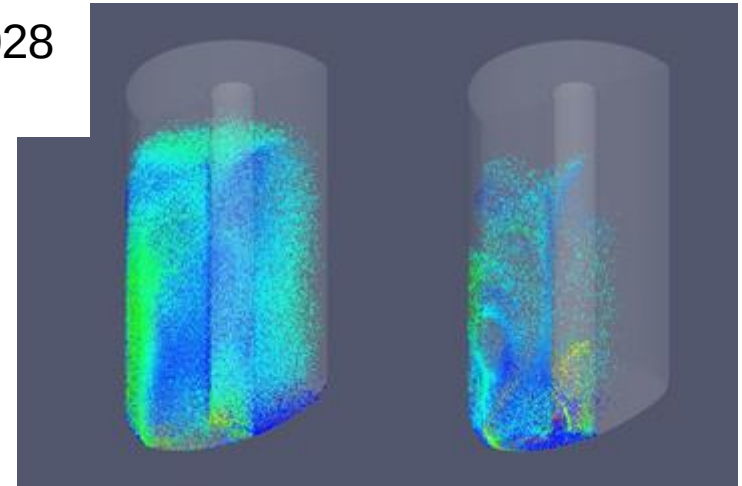
Prof. Dr.-Ing. Martin Sommerfeld

Prof. Dr. Berend van Wachem

ERCOFTAC Coordinator: Dr. Richard Seoud

1-2 October 2015, Imperial College, London, UK

FPR-Mixer: St = 0.028
and St = 0.69



ERCOFTAC SIG12:
Dispersed Turbulent
Two-Phase Flow

Program

Thursday 1 October 2015

8:30	Registration & Coffee	
9:30	Industrial challenges for computational turbulence dispersed multiphase Flows, introduction to the course	Prof. B. van Wachem
10:30	Numerical methods for multiphase flow	Prof. B. van Wachem
11:15	Refreshments	
11:35	Numerical methods for multiphase flow (LBM)	Prof. M. Sommerfeld
12:05	Lunch	
13:05	Forces on Particle, Droplets and Bubbles	Prof. M. Sommerfeld
14:55	Refreshments	
15:15	Modelling elementary processes in dispersed multi-phase flows (particle-wall collisions, inter-particle collisions)	Prof. M. Sommerfeld
16:30	Modelling elementary processes in dispersed multiphase flows (bubbles and droplets collisions)	Prof. M. Sommerfeld
17:45	Modelling elementary process in dispersed multiphase (non-spherical particles)	Prof. B. van Wachem
18:15	Q&A	
18:30	Close	

Program

Friday 2 October 2015

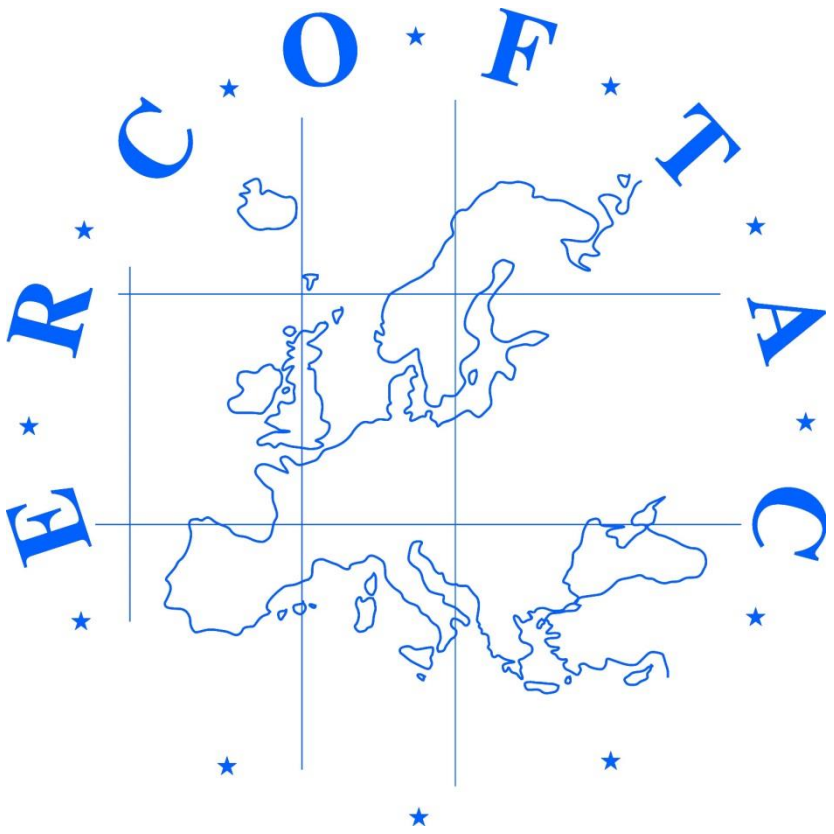
8:30	Coffee	
9:00	Euler/Euler approach with applications	Prof. B. van Wachem
10:00	Summary of Euler/Lagrange approach	Prof. M. Sommerfeld
10:30	Refreshments (30 min)	
11:00	Examples Euler/Lagrange approach	Prof. M. Sommerfeld
11:45	Euler/Lagrange approach ;Coupled CFD/DEM Simulations	Prof. B. van Wachem
12:30	Lunch	
13:30	Test case calculations and examples of application Summary of available test cases, channels, jets, sprays, fluidised beds	Prof. M. Sommerfeld
14:30	Test case calculations and examples of application	Prof. B. van Wachem
15:30	Problem shooting session, presentations from participants (Registration required)	
16:30	Q & A including refreshments	
17:00	Close	

15:30 Problem shooting session, presentations from participants (60 min)

Dr. Johanna Vaittinen; Neste Jacobs Oy, Porvoo, Finnland
Gas-liquid flow apparatus

Dr. Hiromi Ariyaratne Wijesinghe Kaluarachchige,
Telemark University College, Porsgrunn, Norway
Dilute phase horizontal pipe conveying of plastic pellets

Dr. Dirk Baeder, AUDI AG, Ingolstadt, Germany
Engine compartment flows



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