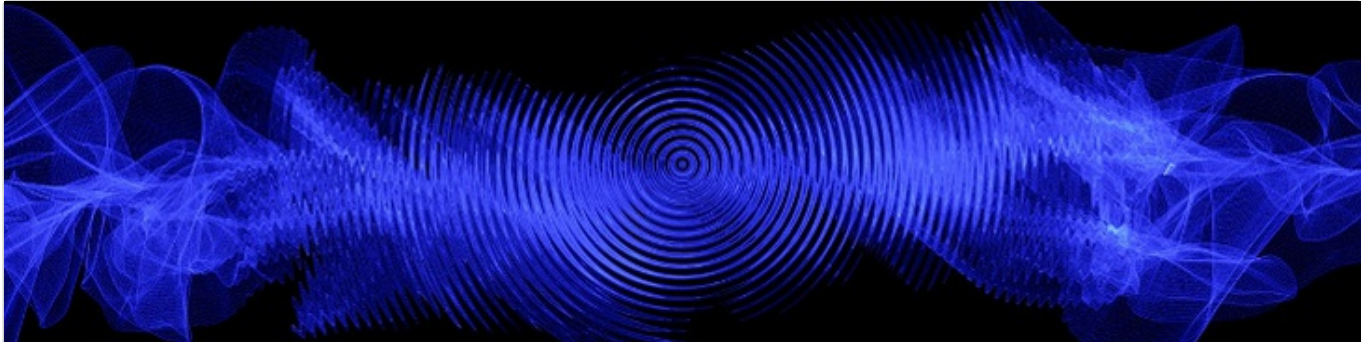


WORKGROUP FOR MULTIPHASE FLOWS



Particle-laden flows, particle deposition, particle separation

Current Projects:

› Analysis and modelling the coating of solid particles

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Analysis+and+modelling-e+coating+of+solid+particles.html)

› Particles in contact - Calculation of the detachment of fine particles (LBM 3D)

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Particle+in+Contact+_+Calculation+of+the+detachment+of+fine+particles+%28LBM+3D%29-p-84.html)

› Wall collisions of non-spherical particles

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Wall+collisions+of+non_spherical+particles-p-86.html)

› Agglomeration and breakage in cyclones

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Influence+of+the+agglomeration+and+breakage+of+particles+on+the+performance+of+cyclone+separators.html)

› Erosion in gas-solid flows

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Development+of+models+and+database+for+studies+of+erosion+in+gas_solid+flows+by+using+experiment+and+numerical+techniques-p-90.html)

› Development of a 3 fluid model based on the Lattice-Boltzmann method

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Development+of+a+3+fluid+model+based+on+the+Lattice_Boltzmann+method-p-214.html)

Completed Projects:

› Turbulent colloidal systems (LBM 3D)

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Turbulent+colloidal+systems.html)

› Thermo - chemical resistant Coderit

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Thermo+chemical+resistant+particle+filters+for+diesel+application.html)

› Non spherical particles in flows

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows+_+particle+deposition+_+particle+separation/Turbulent+flows+with+non+spherical+particles.html)

+spherical+particles.html)

› **Spatial distributed coupling for Euler/Lagrange methods**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Spatial+distributed+coupling+Euler_Lagrange+methods-p-98.html)

› **Disperse multi phase flows**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Disperse+multiphase+flows.html)

› **Dust streaks in swirl flows**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Dust+streaks+in+closed+circles.html)

› **Particle deposition concerning agglomeration**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Particle+deposition+concerning+agglomeration.html)

› **Horizontal channel flow**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Horizontal+channel+flow.html)

› **Electrostatically assisted production of powder coatings**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Electrostatically+assisted+production+of+powder+coatings.html)

› **Calculation of an electrostatic precipitator**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Calculation+of+an+electrostatic+precipitator.html)

› **Particle agglomeration and agglomerate structure**

(https://www.mps.ovgu.de/mps/en/Research/Multiphase+Flows/Particle_laden+flows_+particle+deposition_+particle+separation/Particle+agglomeration+and+agglomerate+structure.html)