DCS COMPUTING

DESIGN

CREATE

SIMULATE

DEM, CFD AND CFD–DEM SOFTWARE TRAININGS

TRAINING

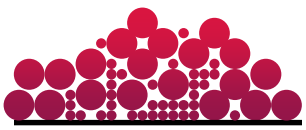
OVERVIEW

get crucial **KNOWLEDGE**

directly from the **ARCHITECTS**

ASPHERIX® DEM Software

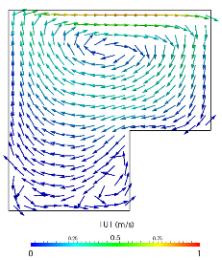
Our solution for the **SIMULATION OF BULK MATERIALS** and the key to faster innovation and process optimization.



- Fully parallel
- Million+ particles
- Various particle shapes
- Large variety of physics models
- For desktop and clusters
- GUI available

CFDEM®coupling CFD-DEM Software

The coupling interface for ASPHERIX® and our solution for coupled simulations of **BULK MATERIALS AND FLUIDS**.



- Fully parallel
- CFD 4-way coupling
- Resolved and unresolved models
- Highly extendable and customizable
- For desktop and clusters
- GUI workflow available

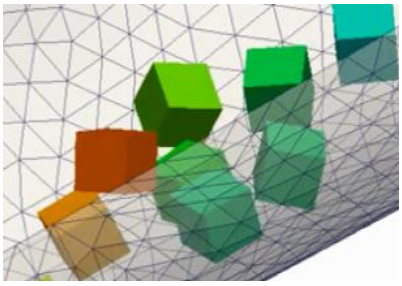
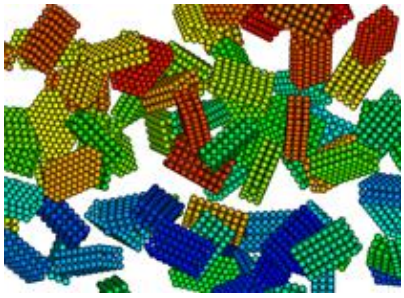
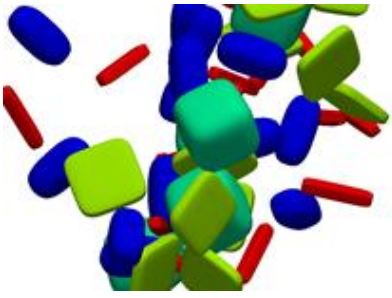
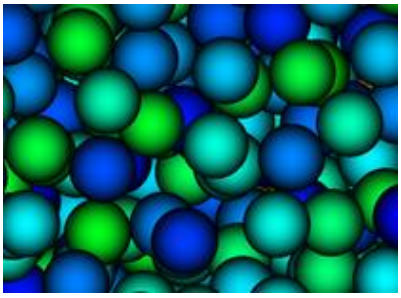
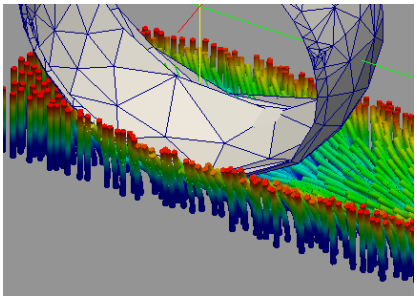
TRAINING

ASPHERIX® SHORT COURSE

DCS COMPUTING

COURSE GOALS

- Learning the basics of numerical particle simulations with the "Discrete Element Method" (DEM)
- Overview of the theory of contact models, timestep restrictions, material calibration, etc.
- Learn to use Aspherix® via GUI and command line
- Postprocessing of Aspherix® simulations
- Basic material calibration: find correct model parameters for a material
- Participants learn to extend Aspherix® via the API

ASPHERIX

COURSE BENEFITS

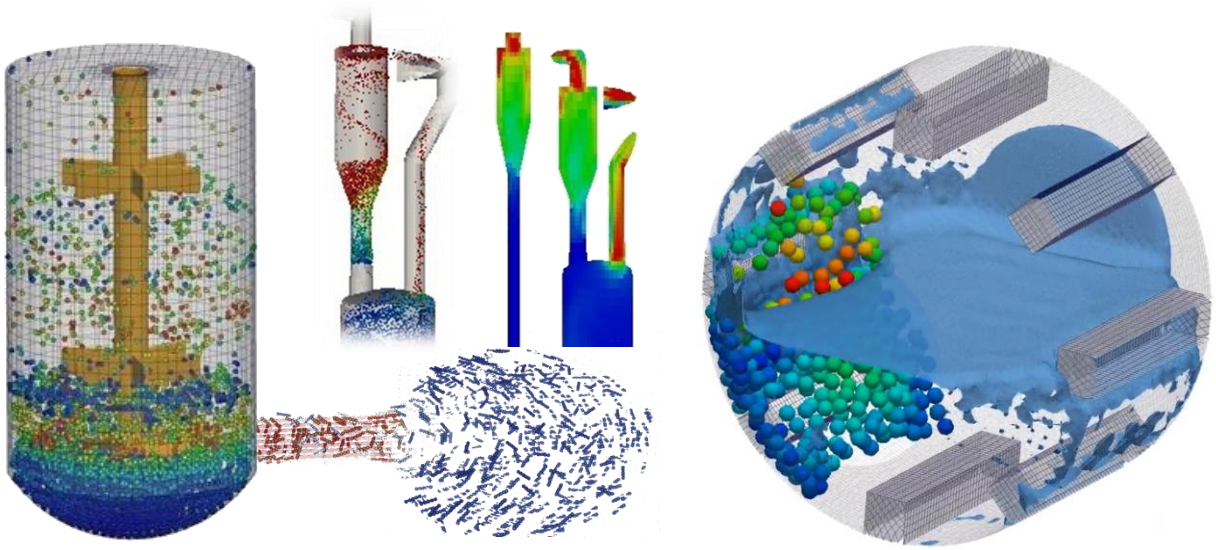
- Intense hands-on-training directly with the architects of Aspherix®
- Printed course materials
- Free lunch and coffee
- One networking dinner

TRAINING

CFDEM®COUPLING SHORT COURSE

COURSE GOALS

- General introduction (e.g. drag modelling, first CFD simulations)
- Learn to use and modify Open Source CFD for specific purposes (e.g. modifying a solver)
- Getting started with CFDEM®coupling (CFD-DEM) (e.g. structure of a coupled simulation, available models, running & postprocessing a simulation)
- Presentation of a GUI workflow
- Basic material calibration (find correct model parameters for a material)
- Introduction to fluid-particle heat transfer



COURSE BENEFITS

- Intense hands-on-training directly with the architects of CFDEM®coupling
- Printed course materials
- Free lunch and coffee
- One networking dinner

TRAINING

COURSE SCHEDULE – FAST TRACK

DAY	MORNING	AFTERNOON	EVENING
MON	**ASPHERIX®** 09:00 – 12:30 Introduction & Theory	**ASPHERIX®** 13:30 – 17:30 Aspherix® Simulation set-up with GUI	
TUE	**ASPHERIX®** 09:00 – 12:30 From basic to advanced usage, API presentation	**CFDEM®coupling** 13:30 – 17:30 Open source CFD usage and simulation set-up with GUI	**Course dinner** 19:00 – open
WED	**CFDEM®coupling** 09:00 – 12:30 Introduction & usage of CFDEM®coupling	**CFDEM®coupling** 13:30 – 17:30 Advanced open source CFD-DEM development and Q&A	
THU FRI	4th CFDEM®conference		

TRAINING

COURSE RATES AND PACKAGES

Prices Short Courses – Regular rate

ASPHERIX	CFDEM COUPLING
900 €	900 €

900 € + 900 € = ~~1.800~~ € 1.600 € *

Prices Short Courses – Early bird rate

ASPHERIX	CFDEM COUPLING
650 € ~~900 €~~	650 € ~~900 €~~

900 € + 900 € = ~~1.800~~ € ~~1.600~~ € 1.250 € *

*** Including a free ticket for CFDEM®conference**

TRAINING

REGISTRATION FORM

Short Courses					
Date / Day Course	28th September – 2nd October 2020				
	Mon	Tue	Wed	Thu	FR
☐ ASPHERIX®	09:00 - 17:30	09:00 - 12:30			
☐ CFDEM®coupling		13:30 - 17:30	09:00- 17:30		
☐ CFDEM®conference				08:30- 17:00 (+dinner)	09:00 – 16:00 (+farewell)

☒ Please mark course and fill out participant and invoicing information

Title: First name:		Last name:
Organization:		VAT Nr.:
Street:		
Zip code:	City:	Country:
Email:		Telephone:

I confirm that I comply with the registration terms.

Date and signature: _____

Please send completed form by e-mail to training@dcs-computing.com

Early bird rates for registrations before 30th June 2020.

REQUIREMENTS

The participants will have to bring their **own** laptop with the following requirements:

- OS Win or Linux
- 8 GB RAM / i5 or equivalent min.
- min. 16 GB free disc space
- along with an already installed virtual box. Further information on the installation of the virtual box will be provided separately prior to the course

- All Courses are designed for beginners with opportunities for questions on different levels of knowledge and skills.
- You can book each course separately.
- Attending the Aspherix® course prior to the CFDEM®coupling is not mandatory but highly recommended.

TERMS

1) All information printed in this leaflet is subject to modifications and errors.
2) After registration, DCS Computing GmbH will issue an invoice for the course.
3) The course fee is due within 30 days net. In case of a late registration at least 2 weeks before the start of the course.
4) Invitation letters are issued only after payment.
5) Cancellation policy: If you cancel less than two weeks prior to course start, you have to pay the full fee, but you are eligible to take part in one of the next course runs with a discount of 35%.
6) Course language is English, material is also provided in English.
7) Participants have to bring their own bootable Laptops (see above).

ACCOMMODATION

The participants are responsible for booking their own accommodation.
The following hotels are proposed:

- Austria Trend Hotel Schillerpark (****)
  ttp://www.austria-trend.at/Hotel-Schillerpark/en/

- Park Inn by Radisson Linz Hotel (****)
  https://www.parkinn.de/hotel-linz

- AMEDIA Hotel Linz (****)
  https://amediahotels.com/de/hotels/linz/

- Star Inn Hotel Linz Promenadengalerien, by Comfort (***)
  https://starinnhotels.com/star-inn-hotel-linz-promenadengalerien-by-comfort/

- Hotel ibis Linz City (***)
  http://www.ibis.com/de/hotel-1722-ibis-linz-city/index.shtml