

CFD in der Schiffshydromechanik

Vorlesungen: Montag / 11-13 Uhr / Prof. Kornev

Übung: Dienstag / 13-15 Uhr / M.Sc. Asad Yamin, M.Sc. Mehrdad Kazemi

N	Datum	Lecture	Exercise
Potential methods for calculation of forces acting on the oscillating ships			
1	10.10.2022	Principles of panel methods with application to wave problems	11.10.2022 Exercise panel methods Kornev
2	17.10.2022	Strip theory	18.10.2022 PDstrip program Luise Draheim
3	24.10.2022	Principles of Rankine source method for calculation of seakeeping	25.10.2022 OpenFoam installation Yamin
CFD methods for calculation of forces acting on ships			
	31.10.2022	Holiday	01.11.2022 Grid Generation Airfoil NACA 0012 Asad and Mehrdad
	07.11.2022	Cancelled	08.11.2022 Simulation of the Airfoil NACA 0012 Asad and Mehrdad
4	14.11.2022	Introduction into Finite Volume method	15.11.2022 Simulation of the Airfoil NACA 0012 Asad
5	21.11.2022	Introduction into Finite Volume method	22.11.2022 Exercises on Finite Volume Methods Asad
6	28.11.2022	Review of turbulence models	29.12.2022 Exercises on Finite Volume Methods and check of Airfoil calculations Asad
Airfoil calculations are finished			
7	05.12.2022	Review of turbulence models	06.12.2022 Grid generation Wigley ship Asad and Mehrdad
8	12.12.2020	Grids	13.12.2022 Exercises on turbulence models Asad

9	19.12.2022	Introduction into Volume of Fluid and level set methods to model the free surface effects	20.12.2022 Exercises on turbulence models Asad
	04.01.2023	cancelled	05.01.2023 Wigley ship simulations with OF Asad
10	11.01.2023	Motion equations. Navier Stokes equation in moving reference frame	12.01.2023 Wigley ship simulations with OF Asad
Wigley simulations are finished			
11	18.01.2023	Application of CFD to ship hydromechanics. Experience. Samples.	19.01.2023 Propeller simulations with OF
12	25.01.2023	CFD for Energy Saving Devices CFD for bow thrusters Mehrddad Kazemi	26.01.2023 Propeller simulations with OF