# 2024 Kratos Multiphysics WORKSHOP @ UNIPD

Antonia Larese University of Padova (Italy)

Rubén Zorrilla Martínez UPC/CIMNE (Spain)

Carlos Roig CIMNE (Spain)

Suneth Warnakulasuriya Technische Universitat Braunschweig (Germany)

Nicolò Crescenzio University of Padova (Italy)

November 6-8, 2024

#### Kratos Workshop Day 1 - November 6th, 2024

Time	Description
14:00 - 14:30	Welcome
	Introduction to Kratos
14:30 - 15:15	Kratos. Why? What? How? An Historical Perspective (Riccardo Rossi)
15:15 - 16:00	Kratos: an Overview (Pooyan Dadvand)
16:00 - 16:30	Coffee Break
	Kratos 4 Industry
14:30 - 15:15	Collaboration with Industry in Germany (Suneth Warnakulasuriya)
15:15 - 16:00	Deltares (Jonathan Nuttall)
15:15 - 16:00	Altair (Pooyan Dadvand)

## Kratos Workshop Day 2 – November 7th, 2024

Time	Description
09:00 - 09:30	What's New in Kratos? Application Session (1) Computational Fluid Dynamics (Rubén Zorrilla Martínez)
09:30 - 10:00 10:00 - 10:30	Computational Solid Mechanics (Suneth Warnakulasuriya) Reduced Order Models (Riccardo Rossi)
10:30 - 11:00	Coffee Break
	What's New in Kratos? Application Session (2)
11:00 - 11:30	Coupling: the CoSimulationApplication (Rubén Zorrilla Martínez)
11:30 - 12:00	Particle Methods: the MPMApplication (Antonia Larese)
12:00 - 12:30	TBD
12:30 - 14:00	Lunch Break
	What's New in Kratos? Application Session (3)
14:00 - 15:00	The GeoMechanicsApplication (Jonathan Nuttall)
	What's New in Kratos? Core Session
15:00 - 16:00	GUI and FlowGraph, Multistage and Register (Carlos Roig)
16:00 - 18:00	Round Table & Coffee

### Kratos Course – November 8th, 2024

Time	Description
	Kratos Course (Session 1)
09:00 - 09:30	Kratos Installation
09:30 - 10:00	Using Kratos GUI
10:30 - 11:00	Coffee Break
	Kratos Course (Session 2)
11:00 - 11:30	Kratos Input Files and I/O
11:30 - 12:00	Data Management
12:30 - 14:00	Lunch Break
	Kratos Course (Session 3)
14:00 - 14:40	Solving Strategies
14:40 - 15:20	Manipulating Solution Values
15:20 - 16:00	Multiphysics with Kratos
16:00 - 16:30	Coffee Break
16:30 - 17:00	Technical discussion of ongoing issues

#### WORKSHOP VENUE