



SEMINAR

APPLIED MATHEMATICS AND MECHANICS

FS986

2 June 2023

A DCAMM seminar No. 766 will be presented by

Professor Esteban Ferrer
ETSIAE (School of aeronautics) –
Univ. Politécnica de Madrid, Spain

The title of the lecture is

New avenues in high order fluid dynamics

Abstract:

We present the latest developments of our High-Order Spectral Element Solver (HORSES3D), an open source high-order discontinuous Galerkin framework capable of solving a variety of flow applications, including compressible flows (with or without shocks), incompressible flows, various RANS and LES turbulence models, particle dynamics, multiphase flows, and aeroacoustics. Recent developments allow us to simulate challenging multiphysics including turbulent flows, multiphase and moving bodies, using local h/p-adaptation and multigrid time advancement. In addition, we present recent work that couples Machine Learning techniques and high order simulations.

DATE:	Friday, 16 June 2023
TIME:	12:00 – 12:45
PLACE:	DTU Compute, Building 303A, Auditorium 41 Technical University of Denmark

Sharing this invitation and signing up

Bring your lunch / based on accepted participants a sandwich is offered on a first-come-serve basis. Sign up via the MoDS E-mail list via <https://dtumods.github.io/> (and by accepting this outlook invitation)

All interested persons are invited.

Niels Leergaard Pedersen

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