

NOTICE of SEMINARS @ [UNISA](#), Fisciano CAMPUS

[SPH](#) / [DualSPHysics](#) / [SWASH](#):

Basics, applications and guidelines in the field of civil and environmental engineering

Seminar #1: Smoothed Particle Hydrodynamics (SPH) / DualSPHysics / SWASH – basics
Wednesday May 4, 15.00 – 18.00, Room [CAD-102](#), Building E1, 2nd floor

Seminar #2: DualSPHysics / SWASH – applications
Thursday May 5, 9.00 – 12.00, Room [CAD-102](#), Building E1, 2nd floor

Seminar #3: DualSPHysics / SWASH – guidelines
Friday May 6, 9.00 – 12.00, Room [CAD-102](#), Building E1, 2nd floor

by

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chaired by [Giacomo Viccione](#)

The Seminars aim at providing a basic introduction to two different numerical modelling approaches for simulating fluid-structure interactions, with applications in hydraulic and coastal engineering.

Dr. Corrado Altomare will provide a comprehensive overview of the mesh-less model DualSPHysics, based on the Smoothed Particle Hydrodynamics Method (SPH). Lectures on the non-linear shallow waters equation model SWASH will be given by Dr. Tomohiro Suzuki.

On the first day, fundamentals of the two numerical approaches will be provided. During the second day the latest developments and applications of SWASH and DualSPHysics will be presented, whereas on the third day the attendees will be guided through the settings, main options and parameters to execute the numerical solvers (you may want to bring your notebook).

Dr. Altomare and Dr. Suzuki are internationally recognised expert in coastal engineering, wave-structure interaction and numerical modelling and main developers of DualSPHysics and SWASH, respectively.

Participation is free, kindly register [here](#) by May 2nd, 2022

Certificate is issued upon request



DualSPHysics is based on the Smoothed Particle Hydrodynamics model. The code is developed (GNU Lesser General Public License) to study free-surface flow phenomena.

SWASH is a general-purpose numerical tool for simulating unsteady, non-hydrostatic, free-surface water waves.

SWASH

