

# The Interface Control Domain Decomposition (ICDD) in Multidimensional Hydrodynamics

*Introduce:*

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*Interviene:*

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## Abstract

The simulation of water motion in a hydrodynamic configuration needs to take into account the complexity of the problem: in order to reduce the computational cost, it is possible to solve the most expensive model where strictly necessary, allowing for the modelization of the remaining part of the domain with simpler models. A suitable coupling technique is then required to couple them. We consider the problem of the coupling between 1D and 2D Shallow Water systems. To this aim we introduce the so-called Interface Control Domain Decomposition (ICDD) method, that represents a valid alternative to more classical methods for the resolution of heterogeneous problems, generalizing the situation of heterogeneous differential problems by introducing a heterogeneity in space.

## Seminario

**Mercoledì 26 settembre 2018**

**Sala Riunioni, ore 14.00**

Via dei Musei 41 - Brescia

