

**Università degli Studi di Pavia**

**Dipartimento di Meccanica Strutturale**

In collaborazione con

**Centro di Simulazione Numerica Avanzata – CeSNA**

**Istituto Universitario di Studi Superiori**

# **Structure-induced hydrodynamic waves**

In this presentation a type of hydrodynamic waves, that occupy a very special place from both practical and theoretical points of view, namely the waves induced in the fluid by the elastic response of the structure during the process of fluid-structure interaction, is considered. The origins and types of these waves are discussed, as well as the history of the respective research efforts, followed by an overview of the modeling approaches. The many challenges, some still unresolved, are addressed as well. Upon examining the theoretical aspects, an overview of the practical aspects is given, with the focus on the scenarios where not accounting for the structure-induced waves can lead to very serious consequences in terms of both the structural damage and the potentially harmful hydrodynamic effects.

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*Giovedì 17 Settembre – ore 15.00, Aula MS1*

*Dipartimento di Meccanica Strutturale*

*Via Ferrata, 1 – Pavia*

**Professor S. Iakovlev will be visiting the Dipartimento of Meccanica Strutturale until July 2010**

**Si noti che il seminario avrà carattere informale e durerà circa 2 ore**