



POLITECNICO
MILANO 1863

SEMINAR ANNOUNCEMENT

B03 Room – Lecco Campus
Department of Civil and Environmental Engineering
May 30th and 31st 2017 – 09:00-13:00

Computational analysis of structures under blast loads and impacts

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Abstract

The assessment of safety under the increasing risk of exceptional loading exerted on structures due to impacts and explosions of various origins leads to complex numerical simulations, carried out in order to better understanding the nature of studied phenomena.

There are many important problems associated with this analysis: material modeling, contact algorithms assumed in analysis, simulation of load, discretization of the entire structure taking into account its complexity and, finally, the solution strategy.

All these issues will be presented and discussed in details on the basis of real-life engineering problems from very different areas: automotive industry, blast-protection technology, impact resistant structures, etc. Additionally, the use of the most common finite element computer codes will be investigated.

Reference: Prof. Gabriella Bolzon (gabriella.bolzon@polimi.it)

Bio-sketch

Prof. Krzysztof Cichocki works at the Department of Structural Mechanics – Koszalin University of Technology (Poland).

His research mainly focuses on the following themes: static and dynamic analysis of structures; nonlinear dynamic analysis of impulsively loaded structures (explosions, impacts); Finite Element Method (FEM).

