

Seminar

COMPUTATIONAL ANALYSIS OF STRUCTURES UNDER BLAST LOADS AND IMPACTS



POLITECNICO
MILANO 1863

POLO TERRITORIALE DI
LECCO

May, 30th - 31th, 2017

room B0.3 - 9:30 am

Polo territoriale di Lecco - Campus via Previati 1/c- Lecco

Master Program: Civil Engineering for Risk Mitigation

Prof. Krzysztof Cichocki

Koszalin University of Technology (PL)

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 such kind of analyses: material modeling, contact algorithms assumed in analyses, simulation of load, discretization of the entire structure taking into account its all complexity, and finally the solution strategy. These problems 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 usage of most common finite element computer codes will be commented.

