



LINIVERSITÀ DEGLI STUDI
DI TRENTO

Dipartimento di Ingegneria Civile,
Ambientale e Meccanica



Modelling and optimal design
of ceramic structures
with defects and imperfect interfaces
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AVVISO DI SEMINARIO

Si comunica che il **16 aprile 2015 a partire dalle ore 13.30**
presso l'aula **D2** (via Mesiano 77) si terrà il seguente seminario

A review of dimensional methods for the statics of masonry domes: the case of Santa Maria degli Angeli in Assisi.

Dott. Nicola Cavalagli

University of Perugia

Abstract

By starting from an historical introduction regarding the methods used in the dimensioning and analysis of masonry domes, the lecture aims to give the tools for a right awareness when approaching such structures. The dimensional analysis can be defined as the main method to which most of the existing structures refer. In this context, between the 17th and 18th century, the research of an optimal architectural shape and a good structural response has led to interesting graphical solutions. The most modern approaches (Limit Analysis, FEM analysis,...) give the opportunity to study masonry domes by several points of view, and then to increase the understanding levels of a structure in achieving reliable structural measures for their conservation and restoration.

These methods have been applied to the dome of the Basilica of Santa Maria degli Angeli in Assisi, which is the object of a research program of the Department of Civil and Environmental Engineering of the University of Perugia. The results of analysis will be shown and some considerations for the design of a permanent structural health monitoring system will be discussed.

Tutti gli interessati sono invitati a partecipare.

Il seminario è organizzato dal gruppo di Scienza delle Costruzioni
(D. Bigoni, L. Deseri, N. Pugno, M. Gei, F. Dal Corso, A. Piccolroaz, R. Springhetti)



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