



UNIVERSITÀ DI PISA

**SCUOLA DI DOTTORATO IN INGEGNERIA “Leonardo da Vinci”**

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Sede amministrativa presso il Dipartimento di Ingegneria Civile e Industriale

## AVVISO DI SEMINARIO

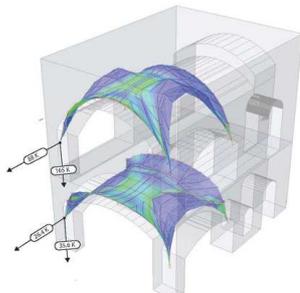
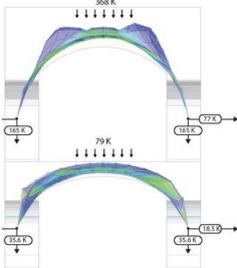
Nell’ambito delle iniziative promosse dalla  
*Scuola di Dottorato in Ingegneria “Leonardo da Vinci”, d’intesa con il  
Dottorato Internazionale in Ingegneria Civile e Ambientale*

**John OCHSENDORF**

*Professor of Engineering and Architecture  
Massachusetts Institute of Technology*

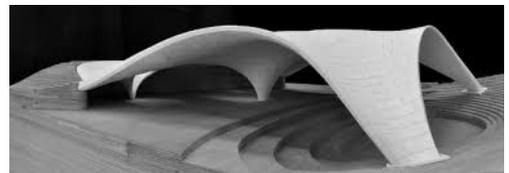
**mercoledì 25 novembre alle ore 16.30** terrà un seminario dal titolo

### *“New Equilibrium Methods for Masonry Vaulting”*



*Summary.* This seminar presents ongoing research at MIT on the analysis of masonry structures. The safety assessment of unreinforced masonry structures is a major problem worldwide, yet there are insufficient analysis tools for practicing engineers. The problem is complicated because in most cases the structure has unknown material properties as well as unknown stress conditions. In addition, historic buildings may be subjected to large support displacements, with differential settlement up to one meter or more. The Masonry Research Group at MIT has recently developed several new analysis

tools within the framework of traditional limit analysis. By treating unreinforced masonry as an assembly of rigid blocks, new results are achieved and verified experimentally. The methods are applied to a series of case studies as well as the design of innovative new structures. This seminar provides an overview of this work and identifies research questions for the future.



[Il seminario sarà tenuto nella Sala Riunioni  
della Sede di Ingegneria Strutturale del DIC](#)

[Referente dell’invito: Riccardo Barsotti](#)

Pisa, 16 novembre 2015.

Il Direttore della Scuola  
(Prof. Ing. Stefano Bennati)