MECHANICS OF MASONRY STRUCTURES

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Program:
- Masonry mechanical behaviour;
- Modelling strategies for the analysis of masonry structures;
- Simplified and block-based modelling of masonry structures;
- Constitutive laws for masonry at macroscale;
- Constitutive laws for masonry at microscale;
- Micro to Macro modelling of masonry structures;
- Open issues in macroscale modelling of monumental existing masonry structures;
- Case studies.

References:
[1.] Mechanics of Masonry Structures (2004) Edited by Maurizio Angelillo, Spinger Nature.
[2.] Numerical Modeling of Masonry and Historical Structures. From Theory to Application (2019) Edited by B. Ghiassi and G. Milani, Elsevier.
[3.] Statics of Historic Masonry Constructions (2018) Edited by Mario Como, Spinger Nature.
[4.] Slides from the course.

Examination and grading:
Implementation of a case study which makes use of a modelling approach for the analysis of masonry structures. The case study can be proposed by the student or provided by the teachers.

Other course details:
The course will offer in-person (online attendance allowed).