WORKSHOP PROGRAM

SEPTEMBER 12th

08:30-09:15	Registration
09:15	Event welcome & Workshop introduction.

WORKSHOP SESSION 1: "TESTING AND MONITORING"

Plenary lectures *(Chairs: Caliò and Zampieri)*:

9:45 Non-Destructive testing and monitoring of masonry arch bridges.
Carmelo Gentile *(Politecnico di Milano)*

10:15 Risk assessment and monitoring of masonry bridges exposed to scour.
Enrico Tubaldi *(University of Strathclyde)*

10:45 Break

11:15 Laboratory testing of a full-scale masonry arch bridge.
Vasilis Sahrosis *(University of Leeds)*

11:45 Session lectures and discussion *(Chairs: Gentile and Zizi)*:

NDTs for the characterization of material degradation and structural damages of masonry arch bridges and collapse evaluation.
Filippo Ubertini, Nicola Cavalagli *(University of Perugia)*

Experimental characterization of the structural behaviour of masonry arch bridges
Cristina Costa *(University of Porto)*

Monitoring of railway arch bridges
Alberto Mauro, Giulia Polimanti *(RFI)*

Structural response of masonry arch bridges with scoured piers.
Fabrizio Scozzese *(Università di Camerino)*

12:50 Lunch

13:50 The NORISK International Master in Risk Assessment and Management of Civil Infrastructures
Mariano A. Zanini *(University of Padova)*

WORKSHOP SESSION 2: "ASSESSMENT AND ANALYSIS"

Plenary lectures *(Chairs: Sarhosis and Cannizzaro)*:

14:00 Practical analysis and assessment of masonry arch bridges.
Matthew Gilbert, Serena Amodio *(University of Sheffield)*

14:30 A 3D discrete-macro-element-method for the structural assessment of masonry bridges.
Ivo Caliò *(University of Catania)*

15:00 Multi-level assessment of masonry arch bridges.
Lorenzo Macorini *(Imperial College London)*

15:30 FE limit analysis modelling of masonry arch bridges interacting with the backfill: suitability and open challenges.
Gabriele Milani, Yiwei Hua *(Politecnico di Milano)*

16:00 Virtual experiments on masonry arches and barrels with the help of the discrete element method.
Katalin Bagi *(Budapest University of Technology and Economics)*

16:15 Break

16:30 Session lectures and discussion *(Chairs: Macorini and Cavalagli)*:

Crack pattern in masonry bridges including soil elasticity.
Vincenzo Mallardo *(University of Ferrara)*

Advanced 3D modelling of masonry arch bridges subjected to earthquake loadings.
Bartolomeo Pantò *(Durham University)*

Effect of the damage state on structural safety of masonry bridges.
Corrado Chisari *(University of Campania " Luigi Vanvitelli")*

Nonlinear numerical simulation tools for in-service assessment of masonry arch bridges.
Ruben Silva *(University of Porto)*

Discretization issues in kinematic limit analysis of masonry arch bridges.
Nicola Grillanda *(University of Ferrara)*

17:50 Closing session

19:30 Social Dinner
Departure shuttle at 19.15 in Prato della Valle (Padua). For more information: https://www.womab.com/social-dinner

SEPTEMBER 13th

09:00 Session lectures and discussion *(Chairs: Oliveira and Zizi)*:

Fatigue assessment of existing masonry arch bridges.
Michele D'Amato *(Università degli Studi della Basilicata)*

Integration of advanced modeling and cost-effective strategies in the structural analysis of masonry bridges as operational support for the design of the knowledge process and management of uncertain parameters.
Luigi Salvatore Rainone[1], Luis Carlos Martins da Silva[2], Vito Tateo[1], Siro Casolo[2], Giuseppina Uva[1]
([1] *Politecnico di Bari;* [2]*Politecnico di Milano*)

Seismic retrofit of an historical Italian railway masonry arch bridge
Guido Furlan (Net Engineering)

WORKSHOP SESSION 3: "STRENGTHENING AND MAINTENANCE"

Plenary lectures *(Chairs: Ubertini and Scozzese)*

9:45 Discussion on the different strengthening techniques for masonry bridges.
Paolo Zampieri *(University of Padova)*

10:15 Masonry arch bridges: from visual inspection to structural assessment.
Gianfranco De Matteis *(University of Campania " Luigi Vanvitelli")*

10:45 Break

11:15 Masonry arch bridges: from non-destructive techniques and numerical models to repair.
Daniel Oliveira *(University of Minho)*

11:45 Session lectures and discussion *(Chairs: De Matteis and Costa)*:

Strenthening strategies for spandrels of masonry arch bridges.
Natalino Gattesco, Ingrid Boem *(University of Trieste)*

Numerical modelling of retrofitting strategies of masonry arch bridges by means of the Discrete Macro-Element Method.
Francesco Cannizzaro *(University of Catania)*

Plenary lecture *(Chair: Caliò)*

12:15 Partitioned modelling for effective multi-fidelity analysis of masonry arch bridges
Bassam A. Izzuddin *(Imperial college of London)*

12:45 Workshop Closing Ceremony

GIORNATA-STUDIO FABRE: VALUTAZIONE, GESTIONE, MANUTENZIONE E MONITORAGGIO DEI PONTI IN MURATURA