WORKSHOP PROGRAM

SEPTEMBER 12th

09:00 Registration

09:30 Event welcome & Workshop introduction.
Carlo Pellegrino & Paolo Zampieri (*University of Padova*)

WORKSHOP SESSION 1: "TESTING AND MONITORING"

Plenary lectures:

10:00 Non-Destructive testing and monitoring of masonry arch bridges.
Carmelo Gentile (*Politecnico di Milano*)

10:30 Risk assessment and monitoring of masonry bridges exposed to scour.
Enrico Tubaldi (*University of Strathclyde*)

11:00 Break

11:30 Laboratory testing of a full-scale masonry arch bridge.
Vasilis Sahrosis (*University of Leeds*)

12:00 Session lectures and discussion:

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*)

13:00 Lunch

WORKSHOP SESSION 2: "ASSESSMENT AND ANALYSIS"

Plenary lectures:

14:00 Practical analysis and assessment of masonry arch bridges.
Matthew Gilbert (*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*)

16:30 Break

17:00 Session lectures and discussion:

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*)

18:00 Closing Session lectures and discussion

SEPTEMBER 13th

09:00 Session lectures and discussion:

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

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:

10:00 Discussion on the different strengthening techniques for masonry bridges.
Paolo Zampieri (*University of Padova*)

10:30 Masonry arch bridges: from visual inspection to structural assessment.
Gianfranco De Matteis (*University of Campania " Luigi Vanvitelli"*)

11:00 Break

11:30 Masonry arch bridges: from non-destructive techniques and numerical models to repair.
Daniel Oliveira (*University of Minho*)

12:00 Session lectures and discussion:

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

Plenary lecture:

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