SAHC 2025 Conference Agenda

- **This is a preliminary version of the SAHC 2025 agenda.**
- **The order of presentations within each session is not yet final and may be subject to change.**
- **If you are listed as a presenter and have completed your registration but are unable to attend the conference, please let us know as soon as possible by sending us an email at sahc2025@epfl.ch. In such cases, you are welcome to prepare a poster, which will be displayed during the conference.**

14th International Conference on Structural Analysis of Historical Constructions

Date: Monday, 15/Sept/2025

8:00am - 8:30am	Registration & Coffee							
9:30am - 10:30am	Keynote Prof. Jan Rots: Masonry modelling for Groningen induced seismicity							
10:30am - 11:00am	Coffee-break							
11:00am - 12:30pm	CE4: Fire risk: inspection, testing and analysis	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-02: Advanced monitoring and analysis tools for collapse prevention of ageing bridges	SS-03: Digital technologies for the inspection and assessment of historic structures	SS-04: Challenges for the mechanical characterisation of masonry material	SS-08: Novel Techniques for Imaging Subsurface Conditions of Heritage Structures	SS-13: Experimental and numerical assessment of the structural performance of earthen structures	SS-17: Historical seismic resisting structural systems
12:30pm - 1:30pm	Lunch							
1:30pm - 2:30pm	Keynote Prof. Graça Vasconcelos: Out-of-Plane Behaviour of Stone Masonry Walls: Influence of Masonry Bond Irregularity							
2:30pm - 4:00pm	CE-1: 20th c. built heritage: history, inspection, analysis, conservation	E-2: Numerical modelling & Structural analysis	E1: Inspection methods, non-destructive techniques and laboratory testing	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-02: Advanced monitoring and analysis tools for collapse prevention of ageing bridges	SS-03: Digital technologies for the inspection and assessment of historic structures	SS-04: Challenges for the mechanical characterisation of masonry material	SS-13: Experimental and numerical assessment of the structural performance of earthen structures
4:00pm - 4:30pm	Coffee-break							
4:30pm - 6:30pm	CE-1: 20th c. built heritage: history, inspection, analysis, conservation	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-2: Numerical modelling & Structural analysis	E-3: Seismic vulnerability & Risk	SS-13: Experimental and numerical assessment of the structural performance of earthen structures	SS-19: Seismic response of masonry cross vaults: Experimental and blind prediction results from the ERIES-REVAULTs project	SS-20: Open Research Data for Historical Constructions – Sharing experimental data and numerical models

Date: Tuesday, 16/Sept/2025

8:30am - 9:00am	Registration & Coffee							
9:00am - 10:00am	Keynote Prof. Arun Menon: Monumental Masonry Constructions under Extreme Earthquake Shaking							
10:00am - 11:00am	CE-2: Vernacular constructions: history, inspection, analysis, conservation	CE-4: Interdisciplinary case studies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-5: Repair and strengthening techniques	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-05: Exploring Digital Tools for the Maintenance and Repair of Historic Structures: Innovations and Applications	SS-10: Seismic assessment and retrofit of cultural heritage buildings in Balkan region
11:00am - 11:30am	Coffee-break							
11:30am - 12:30pm	CE-2: Vernacular constructions: history, inspection, analysis, conservation	CE-4: Interdisciplinary case studies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-5: Repair and strengthening techniques	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-05: Exploring Digital Tools for the Maintenance and Repair of Historic Structures: Innovations and Applications	SS-10: Seismic assessment and retrofit of cultural heritage buildings in Balkan region
12:30pm - 1:30pm	Lunch							
1:30pm - 2:30pm	Keynote Prof. Dina D'Ayala: Application of the ISCARSAH Guidelines to Assess Heritage Structures Exposed to Natural Hazards							
2:30pm - 4:00pm	CE-4: Interdisciplinary case studies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-4: Structural Health Monitoring	E-5: Repair and strengthening techniques	SS-04: Challenges for the mechanical characterisation of masonry material	SS-15: Challenges and possible directions toward harmonized guidelines for the modelling of unreinforced masonry addressed to the seismic safety assessment according to Codes	SS-21: Seismic assessment and retrofit projects in Switzerland
4:00pm - 4:30pm	Coffee-break							
4:30pm - 6:30pm	C-1: Digitalization for documentation and management	E-1: Inspection methods, non-destructive techniques and laboratory testing,	E-2: Numerical modelling & Structural analysis	E-3: Seismic vulnerability & Risk	E-5: Repair and strengthening techniques	SS-14: Strategies and challenges in quantifying uncertainties for predicting the response of masonry buildings	SS-18: Round-table on grouting application methodology and its impact on the efficiency of the intervention. Session in the memory	SS-21: Seismic assessment and retrofit projects in Switzerland

of Prof. Giorgio Macchi.

Date: Wednesday, 17/Sept/2025

8:30am - 9:00am	Registration & Coffee							
9:00am - 10:00am	Keynote Prof. Vasilis Sarhosis: Novel approaches for the structural inspection of historic structures							
10:00am - 11:00am	C-1: Digitalization for documentation and management	C-2: Climate change: adaptation & mitigation	C-3: History of construction and building technology	C-5: Management of heritage structures and conservation strategies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	SS-9: MSc SAHC 2023-2025 graduates & poster competition
11:00am - 11:30am	Coffee-break							
11:30am - 12:30pm	C-1: Digitalization for documentation and management	C-3: History of construction and building technology	C-5: Management of heritage structures and conservation strategies	CE4: Interdisciplinary case studies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	SS-07: New perspectives in Archaeoseismology	SS-11: Earthquake assessment of historical monuments with arches, vaults, domes, irregularities : Case studies and advances in research
1:30pm - 2:30pm	Keynote Prof. Rafael Aguilar: Data driven structural diagnosis of historical constructions							
2:30pm - 4:00pm	C-3: History of construction and building technology	E-2: Numerical modelling & Structural analysis	E-4: Structural Health Monitoring	E6: BIM technologies	SS-06: Advancements in conservation practices for historical infrastructure: inspection, monitoring, structural analysis, and intervention	SS-11: Earthquake assessment of historical monuments with arches, vaults, domes, irregularities : Case studies and advances in research	SS-12: Countable vs uncountable: the impact of construction history, materials and technologies on the structural behaviour of ancient buildings	SS-16: Interventions on heritage structures: lessons learned from past earthquakes
4:00pm - 4:30pm	Coffee-break							
4:30pm - 5:30pm	CE-2: Vernacular constructions: history, inspection, analysis, conservation	C-3: Durability and sustainability	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-4: Structural Health Monitoring	E-6: Other topics - engineering	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-16: Interventions on heritage structures: lessons learned from past earthquakes

Date: Monday, 15/Sept/2025

8:00am - 8:30am	Registration & Coffee			
9:30am - 10:30am	Keynote Prof. Jan Rots: Masonry modelling for Groningen induced seismicity			
10:30am - 11:00am	Coffee-break			
11:00am - 12:30pm	CE4: Fire risk: inspection, testing and analysis	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-02: Advanced monitoring and analysis tools for collapse prevention of ageing bridges	SS-03: Digital technologies for the inspection and assessment of historic structures
	Multi-Scale Fire Modelling Framework in Timber Heritage Structures Wulan Shofa Aisyah, Augustin Guibaud, Alejandra Albuerne, Jose Torero	**EXPERIMENTAL IN-PLANE SEISMIC RESPONSE OF MASONRY WALLS STRENGTHENED WITH INNOVATIVE MODULAR STEEL SOLUTIONS** Carlo Filippo Manzini, Luca Albanesi, Nicolò Damiani, Paolo Morandi	**Conservation of Ageing Steel Bridges through Robustness and Monitoring** Juan C. Reyes-Suárez, Manuel Buitrago, Brais Barros, José M. Adam	**Enhancing Predictive Accuracy for Detecting Deterioration in Cultural Heritage Structures Using Transfer Deep learning** Narges Karimi, Mayank Mishra, Paulo Lourenco
	Damage Assessment of Greek Classical Structure of Marble Stone Affected by Historical Fire Toshikazu Hanazato, Harris Mouzakis, Vasiliki Eleftheriou	**Combined structural-thermal retrofitting of existing URM structures through low-impact innovative anti-seismic coat: practical implementations** Andrea Rossi, Simone Galano, Andrea Dallari	**Evaluating the Dual Impact of Scour and Seismic Loads on Masonry Arch Bridges: A Kinematic Analysis Approach** Jofin George, Kanukuntla Rajkumar	**AI-Assisted Computational Modeling Framework to Perform Structural Analysis of URM Buildings Considering Pre-Existing Damages** Andrei Farcasiu, Peter Griesbach, Rhea Wilson, Qipei {Gavin} Mei, Bora Pulatsu
	Fire Risk Identification and Analysis of the Timber Lounge Bridges in Taishun County, China Chang Su, Ximo Wang, Qian Du, Yongkang Cao	**Structural retrofit of URM pier-spandrel assemblies using an engineered timber cladding system with thermal insulation: first experimental insights** Jiadaren Liu, Bora Pulatsu, Daniel Chung, Philip Tidwell, Daniele Malomo	**Dynamic characterization of a monitored masonry arch bridge using a discrete element approach** Alessia Furiosi, Nicolò Damiani, Maria Rota, Andrea Penna	**A framework for generating a 3D synthetic dataset for automatic crack detection in masonry surfaces** David Boerema, Ihsan E. Bal, Eleni Smyrou, Jiri Kosinka
	Comprehensive Fire Risk Management through Multi-Vulnerability Analysis: Valparaíso's Historic Centre Case Study Pilar Baquedano-Juliá, Tiago Miguel Ferreira, Camilo Arriagada-Luco, Nuria Chiara Palazzi, Cristián Sandoval, Daniel V. Oliveira	**Hygrothermal Testing Protocols for Improved Retrofits of Existing Masonry** Krista Rowan, Christopher Baldwin, Daniel Chung, Cynthia A. Cruickshank, Mario Santana Quintero, Thomas Dalkowski, Daniele Malomo	**Optimized Sensor Placement for Vibration-based Monitoring of Masonry Arch Bridges Using Triaxial and Uniaxial Configurations** Semih Gönen, Oguzhan Gumus, Pere Roca, Luca Pelà	**Digital Approach to Heritage Conservation: first steps for the Digital Twin of Gubbio's Medieval Wall** Eugenio Moreira, Marco Breccolotti, Renan Paulo, Nicola Cavalagli, Filippo Ubertini
	On the fire risk of historical buildings in Minas Gerais- Brazil Luana Maris Pedrosa Cruz Ercan, João Paulo Correia Rodrigues		**An Approach for Identification of Damaged Steel Bridge Signature**	

Numerical study of a room fire in a wooden-frame historical building
Shu-Fen Tung, Chu-Tsen Liao, Heui-Yung Chang, Chi-Ming Lai

Experimental Investigation of an Innovative Seismic-Energy Coating System for Enhancing Structural Integrity and Thermal Efficiency in Existing Masonry Buildings
Giovanna Longobardi, Marius Mosoarca, Antonio Formisano

Self-Sensing Natural Hydraulic Lime-Based Mortars with Carbon Microfibers
Ali Dalalbashi, Virginia Mendizabal, Anastasios Drougkas, Vasilis Sarhosis

Using Artificial Neural Network
Kalyan Goswami, Akhil Upadhyay

Preventing collapse in ageing masonry arch bridges: experimental analysis and numerical validation
Larisa Garcia-Ramonda, Viktoria Hrabinova, Albert Cabané, Pere Roca, Luca Pelà

FULL-SCALE MASONRY BRIDGE LOADING TEST: EXPERIMENTATION VS NUMERICAL CALCULATIONS
Paul Taforel, Marine Bagnéris, Judith Christophe, Anne-Sophie Colas, Frédéric Dubois, Benoit Malenfant, Pierre Marquis-Lhuillier, Pierre Morenon, Omar Moreno-Regan, Gérard Viossanges, Sylvie Yotte

Post-earthquake forensic assessment of a historical cross-vault using the physics-informed ICP (π-ICP) algorithm
Giulio Lucio Sergio Sacco, Sinan Acikgoz

A Machine Learning-based Survey Strategy for the Safety Assessment of Masonry Churches Based on Prior Damage
Simon Szabó, Claudia Casapulla

SS-04: Challenges for the mechanical characterisation of masonry material

An overview of codes and regulations on the qualification and mechanical characterization of existing masonry
Ziba Sharafi-Roumi, Filippo Casarin, Maria Rosa Valluzzi

Mechanical characterization of existing masonry of the Marche Region: comparisons between experimental in-situ measurements and the Italian Seismic Code provisions
Enrico Quagliarini, Guido Romano, Giuseppe Pace

Mechanical characterization of non-standard masonry samples extracted from

SS-08: Novel Techniques for Imaging Subsurface Conditions of Heritage Structures

Integration of tomographic inspections and 3D point clouds for supporting the diagnosis of masonry walls
Pablo Sanz-Honrado, Rubén Santamaria-Maestro, Rubén San Segundo-Camarero, Javier Ortega, Luis Javier Sánchez-Aparicio

Unreinforced Masonry Interior Morphology Digitization via Ultrasonics and Data Fusion
Elyse Hamp, Mario Santana Quintero, Bora Pulatsu, Jeffrey Erochko

Development of Tomographic Imaging Methods for Evaluating Civil Structures
Michael Schuller

SS-13: Experimental and numerical assessment of the structural performance of earthen structures

Evaluation of the reduction factor (R) for the design of earthen constructions
Nicola Tarque, Richard Gutierrez, Edisson Moscoso, Daniel Torrealva

Structural evaluation of earthen and fired tile vernacular vaults of sha'rbafi workshops in Kashan, Iran
Anna Remus, Bridgit Anh Nguyen, Nader Sayadi, Renato Perucchio

Experimental study on the behaviour of adobe material treated through ethyl silicate: the case study of Mes Aynak archaeological site (Afghanistan)

SS-17: Historical seismic resisting structural systems

IMPORTANCE OF LOCAL CONSRUCTION METHODS IN RESTORATION
Emine Gorun Arun

Seismic Performance Assessment of Timber-Laced Masonry: A Numerical Study of Dhajji-Dewari and Kath-Kuni Walls
Keerthi Teja Harathi, Thainswemong Choudhury

Experimental seismic assessment of traditional hybrid timber-masonry panel subjected to lateral in-plane loads
Daniela Muñoz, Belén Jiménez, Cristián Sandoval, Felipe Orduz

	old buildings in Montreal(QC,Canada) Lucy Jane Davis, Sondre Løvfall Aasen, Romaric Debrousses, Daniele Malomo	**Understanding acoustic wave propagation through heterogeneous materials: numerical and experimental investigations at different scales** Javier Ortega, Fernando Ramonet, Sofía Aparicio, Margarita González, José Javier Anaya	Alessia Lico, Rebecca Grazzini, Silvia Rescic, Arash Boostani, Barbara Sacchi, Giulia Misseri, Ugo Tonietti, Luisa Rovero	**Experimental research on structural behavior of traditional Chinese brick masonry arches** Qing Chun, Boxu Lin, Yukun Ma
	Mechanical Characterisation of Multi-Wythe Quay Walls in Amsterdam Uday Jain, Rita Esposito		**Digital Modelling and Experimental Structural Assessment of the Cathedral Basilica of Lima** Victor Quinto, Diana Cuadros, E. Mauricio Gonzales, Rafael Aguilar	**Out-of-plane behaviour of a structure with dry jointed mortar block walls simulating an Inca room in the Coricancha Temple, Cusco, Peru** Jeffrey Juan Sanchez Solis, Yohara Daniel Mejía Albarracín, Leonel Lipa Cusi
	Characterization of portuguese masonry through the use of in situ flat-jacks tests Jorge Emanuel Ramalho da Fonseca, Hugo Filipe Pinheiro Rodrigues, Aníbal Guimarães da Costa	**Automated Sonic Tomography for Heritage Infrastructure Inspection Using a Cable-Driven Robotic System** Fernando Ramonet, Javier Ortega, Pablo Sanz-Honrado, Sofía Aparicio, Margarita González, Francisco Javier Suárez, Juan Carlos Liébana, José Javier Anaya	**Experimental study of the bonding between TRM reinforcements and rammed earth structures** Paula C. Tole, F. Javier Baeza, Luis Estevan, Benjamín Torres, Salvador Ivorra	**Construction analysis of Greek adobe masonry buildings** Ioanna Papandreou, Androniki Miltiadou Fezans
	In-Situ Characterisation of the Gran Pórtico of Medina Azahara for Seismic Vulnerability Assessment and Conservation Beatriz Zapico Blanco, Luis Manuel Giraldez Segura, José Daniel Rodriguez Mariscal, Miguel Carrión Colchero, Mario Solís	**Reconstructing Masonry Textures in Pompeii's Buildings Using Ground-Penetrating Radar: A Feasibility Study** Sara Donzelli, Lorenza Petrini, Alessandra Zambrano, Vincenzo Calvanese, Gabriel Zuchtriegel, Maurizio Lualdi	**Seismic Analysis of an Earthen Free-standing Bell Tower in the Historical Center of Cusco (Peru): ambient vibration testing, model calibration and seismic capacity assessment** Mijail Montesinos, Diego Mercerat, Julio Rojas-Bravo, Vladimir Alferez, Andy Combey	
12:30pm - 1:30pm	**Lunch**			
1:30pm - 2:30pm	**Keynote Prof. Graça Vasconcelos: Out-of-Plane Behaviour of Stone Masonry Walls: Influence of Masonry Bond Irregularity** **Out-of-Plane Behavior of Stone Masonry Walls: Influence of Masonry Bond Irregularity** Graça Vasconcelos, Antonio Murano, Javier Ortega, Hugo Rofriguez			
2:30pm - 4:00pm	**CE-1: 20th c. built heritage: history, inspection, analysis, conservation** **Seismic and structural analysis of a historical building registered as cultural heritage in Turin, Italy** Amirehsan Charlang Bakhtyari, Marco Civera, Riccardo Pollo, Bernardino Chiaia	**E-2: Numerical modelling & Structural analysis** **The role of boundary conditions and overburden mass on the rocking dynamics of vertical spanning strip walls** Georgios Vlachakis, Carla Colombo, Anastasios I. Giouvanidis, Paulo B. Lourenço	**E1: Inspection methods, non-destructive techniques and laboratory testing** **The Influence of Environmental Conditions on the Performance of Self-Healing Mortars for Masonry Repair** Maria Belen Gaggero, Paul A. Korswagen, Rita Esposito, Jan Rots	**SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.** **Evaluation of the Vibration Characteristics Before and After Seismic Retrofit of a Timber-Masonry Composite World Heritage Building Constructed in 1872**

Classification & Seismic Behavior of Mixed Masonry-RC Structures within Genoa's Historic Building Stock
Margherita Rago, Andrea Brunelli, Sergio Lagomarsino, Serena Cattari

A new theoretical and experimental method for the study of rocking damage of archaeological masonry structures
Gianfranco Martellotta, Anna Castellano, Aguinaldo Fraddosio, Mario Daniele Piccioni

Evaluating the Embodied Carbon of Mortars: From Traditional to Modern Approaches for Sustainable Heritage Conservation
Milica Radovic, Pagona Maravelaki, Vassilis Kilikoglou, Ioannis Karatasios

Hajime Yokouchi, Toshikazu Hanazato, Satoshi Nishioka

Response of undressed stone masonry under diagonal compression: an experimental and numerical study
Larisa Garcia- Ramonda, Madalena Ponte, Mohammad Sadegh Heidari, Igor Lanese, Gerard J. O'Reilly, Elisa Rizzo Parisi, Francesco Graziotti, Luca Pelà, Andrea Penna, Guido Magenes, Rita Bento, Gabriele Guerrini

Model and Soil Calibration for the Seismic Assessment of Concrete Heritage Buildings: the case study of the Ledra Palace Hotel in Nicosia, Cyprus
Ioanna Gamvrili, Antroula Georgiou, Dimitrios Loukidis, Ioannis Ioannou

Optimising Machine Learning Algorithms for Predicting and Mapping the Compressive Strength of Masonry
Panagiotis G. Asteris, Georgios Drosopoulos, Liborio Cavaleri, Antonio Formisano, Anastasios Drougkas, Gabriele Milani, Amin Mohebkhah, Paulo B. Lourenço

Comprehensive Investigation of Hydraulic Lime Based mortars: From Microstructure to Mechanical Performance
Zuzana Slížková, Kateřina Adamcová, Pavla Bauerová, Dita Frankeová, Pavla Náhunková, Mikuláš Hulec

On the original seismic analysis of a modern heritage building based on the theory of seismic wave transmission in buildings
Joel Ramos, Fernando Peña

FFT-based strength homogenization for irregular masonry structures
Elodie Donval, Matti Schneider

Lime mortars with TiO_2 or ZnO nanoparticles for heritage building retrofitting: mechanical analysis and Life Cycle Assessment
Marcos Brana-Linares, Irene Josa, Luis Tomas Silva Klein, Mar Alonso-Martinez, Juan Jose del Coz-Diaz

Operational modal testing of a masonry arch bridge before and after strengthening
Paolo Borlenghi, Carmelo Gentile

Structural assessment of Mexican heritage buildings built in the 20th century
Marcos M. Chávez, Roberto Sánchez

How surface roughness affects shear strength of stone-mortar interface
Hnat Lesiv, Katrin Beyer

Experimental Investigation of High Strain-Rate Effects on the Compressive Behaviour of Pure Lime-Putty Mortar
Ashraf G. Nayel, Lorenzo Macorini, Christian Malaga-Chuquitaype

Historic Structural Concept of Churches with Medieval Origins – 20 Years of Structural Intervention in Transylvania
Boróka Sándor, Dorottya Makay

Assessment of the Hangar where the Largest Wooden Airplane in the World Was Built
Ron Anthony, Douglas Porter, Kent Slade Diebolt, Richard Schmidt

Phase field modelling of fracture propagation in flattened and keyhole notched hydraulic lime mortar discs
Sinan Acikgoz, Emilio Martinez-Paneda, François Hild

A study on Vitruvian mortars for architectural heritage restoration
pier francesco greco, aldo romani, marco paolantoni, catia clementi, angela baldanza, angela bertinelli, massimiliano gioffrè, vittorio gusella, nicola cavalagli

Enhancing structural performance of masonry structures: The potential of ultra-high performance fiber reinforced concrete
Nicoletta Bianchini, Spyridon Paschalis, Andreas Lampropoulos

Non-destructive testing of historic masonry – comparison of techniques for original material analysis in conservation practise
Maphole Emelly Loke, Kumar Pallav, Giuseppe Cultrone

SS-02: Advanced monitoring and analysis tools for collapse prevention of ageing bridges	SS-03: Digital technologies for the inspection and assessment of historic structures	SS-04: Challenges for the mechanical characterisation of masonry material	SS-13: Experimental and numerical assessment of the structural performance of earthen structures
Limit Analysis Modeling of the Osserain Bridge Using Gavrinis Tool Mohamad Moussa, Agnes Fliscounakis, Fekri Meftah, khalil Ferradi	**Preliminary Assessment of the Seismic Vulnerability of Historic Urban Centers Using Artificial Intelligence: A Case Study of the Chimba Quarter in Santiago, Chile** Mauricio Toledo, Constanza Gasca, Nuria Chiara Palazzi	**Experimental mechanical characterisation of masonry structures in existing buildings using NDT and MDT techniques** Albert Cabané, Pere Roca, Luca Pelà	**State of the art of earthquake resistant earthen construction in colombia and peru: from laboratory and numerical research to a latin american construction standard** Nicola Targue, Daniel Ruiz, Juan Carlos Reyes, Marcial Blondet
Improved assessment of masonry railway viaducts under traffic loading using detailed monitoring and 3D FE modelling Stanyslav Grosman, Qili Fang, Lorenzo Macorini, Bassam A Izzuddin	**Management and sustainable preservation strategies of underwater heritage structures through new innovative AI technologies** Kari Christer Avellan, Erika Belopotocanova	**Characterizing unreinforced masonry through core testing** Francesca Ferretti, Rita Esposito	**Seismic Protection Strategies for Rammed Earth-Timber Hybrid Structures in Southeast China's Tulou Architectural Heritage: Integrating Material Property Experiments with Systematic Structural Analysis** Ang LI, Chengwen ZHANG, Jinhu HU, Banglong ZHOU
Identification of damage-sensitive features in masonry arch bridge through 3D FEM modal analysis Viktoria Hrabinova, Larisa Garcia-Ramonda, Pere Roca, Luca Pelà	**Ulugbek Observatory (Samarkand, Uzbekistan): Detailed Evaluation of the Main Instrument by Laser Scanning.** Shakhzod Takhirov, Brian Quigley, Mirzokhid Akhmedov, Ravshan Shamansurov	**Tribometer friction tests on cracked brick-mortar interfaces** Rita Esposito, Karthick Karthick, Alessandro Cabboi	
Vibration-based damage detection and localization in a historical bridge Marco Pirrò, Carmelo Gentile	**A synthetic data generator of realistic masonry point clouds** Yilong Yang, Sinan Acikgoz, Bora Pulatsu	**Compression tests on lime mortar prisms with in-situ X-Ray synchrotron tomography** Miles Robert William Judd, Marialuigia Sangirardi, Thomas Zillhardt, Kutsi Akcicek, Stefan Michalik, Genoveva Burca, James Marrow, Sinan Acikgoz	**Laboratory Study on the Performance of Scaled Adobe Masonry Walls under the Effects of Moisture and Monotonic Lateral Loads** Eduardo Davila, Brad D Weldon, Paola Bandini, Michael J McGinnis, Michael Gangone
Reduction factors for the load-bearing capacity of a bridge with defects Laura Niero, Carlo Pellegrino, Vasilis Sarhosis, Paolo Zampieri	**Symptom-based Prognosis through Integrated Digital Models and Experimental Data** Alessio Crocetti, Gaetano Miraglia, Rosario Ceravolo, Giovanni Ciavarrella, Linda Scussolini, Maurizio Taliano	**Seismic Behavior of URM Structures: A Centrifuge Model Study** Medhat Elmorsy, Antonis Katsamakas, Liam Jones, Eva Brunschweiler, Ioannis Anastasopoulos, Michalis F. vassiliou	**Experimental approach to the use of hot-mixed lime in traditional and contemporary earthen architecture: methodology and scope** Camilla Mileto, Fernando Vegas, Sergio Manzano-Fernández, Alicia Hueto-Escobar
RECONSTRUCTION OF A GOTHIC BRIDGE Antoni Clarés Garcia, Rolando Chacón Flores, Miquel Llorens Sulivera, Irieix Costa Prieto, Martí Ribera Palomeras, Ramón Ripoll Masferrer, Carla Valencia Padin	**A Novel Image-Based Forensic Framework for Concrete in Historical and Modern Structures**	**Vertical Compression Test of Stone Masonry Wall with Mud Mortar** Shivam Gupta, R.N. Dubey, P.C.A. Kumar	**Non-Destructive Evaluation of Rammed**

		Afaq Ahmad, Mati ullah, Vagelis Plevris, Junaid Mir, Sameed Hussain		Earth Using Sonic Waves and Transmission Tomography Mario Solis, José Daniel Rodríguez-Mariscal, Monika Zielinska, Magdalena Rucka
				Structural Characterization of Short Bahareque Walls with Different Lath Anchoring Techniques Diego Andrés Sosa, Israel Andrés Jiménez, Christian Michael Gómez, Juan Carlos Velasteguí, Natividad García-Troncoso, Juan Molina-Cedeño, Cecibel Zambrano
4:00pm - 4:30pm	Coffee-break			
4:30pm - 6:30pm	CE-1: 20th c. built heritage: history, inspection, analysis, conservation	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-2: Numerical modelling & Structural analysis
	Structural Innovation in Colombia: Analysis of the 'Reticular Celulado' slab system and its influence on the development of Modern Architecture Maria Carolina Escobar Solano	Design challenges in shake-table testing of reduced-scale masonry building for the floor response spectra evaluation Francesco Parisse, Stefania Degli Abbati	Critical assessment of ASCE/SEI 7-22 waterborne debris impact calculations for masonry wall design Alessandro De Iasio, Bahman Ghiassi, Riccardo Briganti, Gabriele Milani	Modelling of light damage to façades from combined soil curvature and horizontal strain Paul A. Korswagen, Michele Longo, Jan G. Rots
	Balancing Historical Integrity and Modern Conservation in 20th Century Timber-Imitated Concrete Architecture: The Restoration of the Main Hall of Yu Temple in the Great Yu Mausoleum QIAN ZHENG, SHI HU	Out-of-plane shake-table tests on unreinforced masonry gables Satyadhrik Sharma, Nicolò Damiani, Marta Bertassi, Marco Smerilli, Michele Mirra, Igor Lanese, Elisa Rizzo Parisi, Gerard O'Reilly, Francesco Messali, Francesco Graziotti	Comparison of distinct element modeling strategies of the in-plane response of retrofitted URM structures Yopi Oktiovan, Nicolò Damiani, Francesco Messali, Jan Rots	Settlement cracks in historic masonry churches: limit analysis and numerical modelling Grigor Angjeliu, Giuliana Cardani, Dario Coronelli
	Study on the Bamboo Reinforced Concrete of the 20th Century in China (1910-1960) Qian Du, Bowen Qiu, Xi Chen, Hui Chen, Tingting Xie, Wei Zhao	Artificial Intelligence application to damage assessment of Italian historic masonry building under shaking table testing Domenico Palumbo, Stefano De Santis, Domenico Liberatore, Gianmarco de Felice, Ivan Roselli	Investigating Internal Defects in Flattened Brick Cores: A DEM-Based Parametric Analysis Rhea Wilson, Miles Judd, Sinan Acikgoz, Bora Pulatsu	Numerical modelling of the influence of masonry building stiffness and irregularity on tunnelling induced damage Giacomo Di Santo, Marialuigia Sangirardi, Angelo Amorosi
	Monitoring for conservation planning of		Discontinuum-Based Analysis of URM Walls with Weak Brick and	Development of fragility curves for

the Jorge Machado Moreira building modern heritage
Patricia Cavalcante Cordeiro, Ana Carolina R. Tostes de Oliveira, Thiago Melo Grabois

Sustainable strategies for the conservation and transformation of zoological gardens. The 20th century Naples Zoo as a case study
Gianluigi de Martino, Viviana Saitto, Maria Masi, Stefano Guadagno

Conservation Issues and Proposals for an Early 20th Century Ottoman Aviation Structure
Hasım Yaman Bayram, Umut Almaç

Reviving Tradition in Modern Iranian Architecture: An Analysis of Kamran Diba's Jundishapour University Mosque
Seyed Alireza Seyedi, Mohammad Amir Sechin Matouri, Asma Mehan

Application of a digital image correlation technique to a shaking table test of a half-scale two-storey brick masonry building with a timbrel vault
Yohei Endo, Shuhei Yamamoto, Akito Hatai, Kou Machino, Rikako kato, Yasushi Niitsu, Harris Mouzakis, Pere Roca, Luca Peìa

Experimental dynamic behaviour of vertical spanning strip walls under free and forced vibrations
Carla Colombo, Georgios Viachakis, Dario Vecchio, Nuno Mendes, Anastasios I. Giouvanidis, Nathanel Savalle, Paulo B. Lourenço

Experimental Study of the Seismic Response of As-Built and Reinforced Three-Leaf Masonry Walls Under Hori-zontal only and Horizontal and Vertical Ground Motion Components
Francesco Di Michele, Enrico Spacone, Giuseppe Brando, Guido Camata, Anastasios Sextos, Adam Crewe, George Mylonakis, Matt Dietz, Luiza Dihoru, Humberto Varum

Real Scale Shaking Table tests for the investigation of the influence of the use of vertical connectors between the drums in columns
Vasiliki Palieraki, Eleni Tavouktsi, Charalambos Mouzakis, Constantinos Arvanitis

Strong Mortar under Out-of-Plane Loading
Prabhanjan Prasoon, Bora Pulatsu, P. Ravi Prakash

Computational Planning and Structural Analysis for Robotic Construction of Stone Masonry Walls
Qianqing Wang, Ketson R.M. dos Santos, Katrin Beyer

Analysis of historical dry-joint masonry structures using upper bound limit analysis and homogenization
Nicola Grillanda, Vincenzo Mallardo

DEM Analysis of Axial Load Effects in Stiffness of Masonry Walls
Johnatan Orjuela Mejia, Katrin Beyer

Modelling Short-term Mechanical Loading of Masonry using Particle-Based DEM
Kanaeshvarr Devanand, Bahman Ghiassi

A pattern generator for the evaluation of the "builder's bias" on the mechanical characteristics of planar stone masonry walls
Stavros Markantonis, Christos Zeris

historical masonry buildings on strip foundations exposed to subsidence using NLFE models
Alfonso Prosperi, Michele Longo, Paul A. Korswagen, Mandy Korff, Jan G. Rots

The Influence of Settlement on Seismic Capacity of Unreinforced Masonry Building
Marina Serpe, Alberto Barontini, Valentina Tomei, Ernesto Grande, Paulo Lourenço, Maura Imbimbo

High-fidelity implicit block-based numerical modeling of out-of-plane behavior in unreinforced masonry walls with pre-existing settlement-induced damages
Amirhossein Ghezelbash, Alfonso Prosperi, Satyadhrik Sharma, Antonio Maria D'Altri, Jan G. Rots, Francesco Messali

Numerical Simulations of Temperature Variations in Historical Masonry Façades Considering Soil
Michele Longo, Paul A Korswagen, Jan G. Rots

E-3: Seismic vulnerability & Risk

The Domus of Arianna in Pompei archaeological site. Risk assessment on the colonnades through

SS-13: Experimental and numerical assessment of the structural performance of earthen structures

Guadua Shear Retrofit in Earthen Short Walls

SS-19: Seismic response of masonry cross vaults: Experimental and blind prediction results from the ERIES-REVAULTs project

The ERIES-REVAULTs project: from

SS-20: Open Research Data for Historical Constructions – Sharing experimental data and numerical models

Rammed earth mechanical properties

historical analysis and digitization techniques
Lorenzo Cantini, Maria Adelaide Parisi, Dina Jovanovic, Daniela Oreni

Diego Andrés Sosa, Elvis Ramiro Morales, Paul Andrés Toledo, Juan José Iza, Mayra Alejandra Estrella, David Jahel Bonilla, Juan Fernando Velásquez, Christian Michael Gómez

experimental design to tests and blind predictions
Chiara Calderini, Chiara Cirabisi, Chiara Ferrero, Nicoletta Bianchini, Nuno Mendes, Paulo B. Lourenço, Marco Lamperti Tornaghi, Francisco Javier Molina, Marco Peroni, Simone Peloso, Stefano Podestà, Adamantia Athanasopoulou, Georgios Tsionis

database: challenges in data collection and processing
Yuhan Zhu, Katrin Beyer, Savvas Saloustros

Derivation of Fragility Curves of Masonry Buildings in a Row Aggregate Located in Mirandola (MO)
Silvia Pinasco, Giovanna Longobardi, Andrea Brunelli, Sergio Lagomarsino, Antonio Formisano, Serena Cattari

Mechanically Stabilized Earth Systems in Monumental Structures: Historical Perspectives and Computational Analyses
Dr Elena Kapogianni, Professor Alexander Savaidis

The Stone Masonry Walls Database
Ivana Božulić, Francesco Vanin, Mati Ullah Shah, Savvas Saloustros, Katrin Beyer

Seismic vulnerability assessment of the Montecassino abbey
Marina Serpe, Valentina Cima, Valentina Tomei, Ernesto Grande, Gabriella Musto, Maura Imbimbo

Experimental and numerical investigation on mechanical response of reinforced earth-based masonry system
Jacopo Baldelli, Giosuè Boscato, Antonella Cecchi

Database of 3D stone masonry walls and its analysis based on geometric parameters
Mati Ullah Shah, Savvas Saloustros, Katrin Beyer

Conservation and seismic vulnerability assessment of the lanterns of the Águas Livres Aqueduct in Lisbon, Portugal
B. Quelhas da Silva, P. Candeias, A. Carvalho, J.V. Lemos

Influence of cavities on the structural performance of compressed earth brick masonry: a parametric compari-son of various cavity shapes and sizes
Simon-Pierre Joy SALASSI, Philbert Nshimiyimana, Djoubissie Decroly Denouwe, Adamah Messan, Luc Courard

Open-access database of shake table tests for enhancing the seismic assessment of unreinforced masonry buildings
Mathias Haindl, Ian F. C. Smith, Katrin Beyer

Seismic vulnerability assessment methods of existing unreinforced masonry buildings in Zagreb
Karlo Ožić, Mislav Stepinac, Javier Ortega, Antonela Moretić

Recommendations for structural analysis of heritage adobe structures with irregular floor plans
Betzabeth Jessenia Suquillo Ronquillo, Juan Pablo Chacón, Fabián Rojas

Open-access technical information for the structural analysis of protected built heritage in Spain. A case study: School and Convent of Santo Domingo in Orihuela (Alicante, Spain)
Arianna Guardiola-Víllora, Dina D'Ayala, Sergio Molina, Alireza Kharazian, Juan José Galiana-Merino, Gonzalo Ortuño Saez, Juan Luis Soler Llorens, Jose Antonio Huesca Tortosa, Igor Gómez Doménech, David Montiel López

Fragility curves for Neapolitan RC ecclesiastical buildings (1950-1980) based on a mechanical model
Marco Postiglione, Giuseppe Brandonisio, Bruno Calderoni, Antonio Sandoli, Giovanni Fabbrocino

Preliminary Seismic Vulnerability Assessment of the Hittite Adobe Wall in Arslantepe (Turkey)
Omar AlShawa, Linda Giresini

The influence of different parameters of neighboring buildings in aggregates on the seismic vulnerability level

Maja Mrkonjić, Josip Atalić, Igor Tomić

A simplified approach for seismic vulnerability assessment of masonry buildings

Daniela Ziello, Luciana Di Gennaro, Mariateresa Guadagnuolo, Giuseppe Faella, Gianfranco De Matteis

Evaluating Seismic Capacity of Historical Masonry Buildings: The Critical Role of Vault Damage

Valentina Buonocunto, Fulvio Parisi

TRADITIONAL MASONRY PERFORMANCE IN THE 2022 AFGHANISTAN EARTHQUAKE

DEVIS SONDA, H.KIT MIYAMOTO, SABINE KAST, KIMIRO MEGURO

Date: Tuesday, 16/Sept/2025

8:30am - 9:00am	Registration & Coffee			
9:00am - 10:00am	Keynote Prof. Arun Menon: Monumental Masonry Constructions under Extreme Earthquake Shaking			
10:00am - 11:00am	**CE-2: Vernacular constructions: history, inspection, analysis, conservation**	**CE-4: Interdisciplinary case studies**	**E-1: Inspection methods, non-destructive techniques and laboratory testing**	**E-2: Numerical modelling & Structural analysis**
	Rock-Cut Vernacular Architecture: Exploring Durability Through Surface Hardness Analysis Blen Taye, Tim De Kock	**Structural consolidation with CFRP fabric of the central portal in green Cipollino marble of the Church of San Giacomo in Augusta in Rome.** Gabriela Simoni, Michelangelo Micheloni, Franco Sollazzi, Andrea Valerio Canale, Alessandro Mascherucci, Daniela Porro, Massimiliano De Santis	**Using dynamic measurements to improve earthquake assessments - case studies** Pia Hannewald, Panagiotis Martakis, Yves Reuland, Francesco Vanin, Meriton Beqiraj, Ioannis Drakatos	**Modelling historical aggregates using the equivalent-frame method: the National Palace of Sintra** Madalena Ponte, Gabriele Guerrini, Andrea Penna, Rita Bento
	Indoor Microclimate Quality in the Czech Preserved Vernacular Mountain Architecture: the Ore Mountains Dominika Výšková, Daniela Bošová	**Key Performance Indicators in the field of energy renovation: application to a real case study in Rome, Italy** Beatrice Bartolucci, Francesca Frasca, Chiara Bertolin, Anna Maria Siani	**Calibration of Numerical Models for Seismic Analysis of Historic Masonry Structures: The Venetian Dockyards (Neoria) of Heraklion** Savvas Saloustros, Javier Ortega, Marieta Núñez García, Federica Greco, Chrysl Aranha	**A 3D Nonlinear Macroelement for the Seismic Assessment of Unreinforced and Strengthened Masonry Structures** Christian Salvatori, Gabriele Guerrini, Alessandro Galasco, Andrea Penna
	Restoration of the House of Chamber and Jail, in Mariana, MG, Brazil Benedito Oliveira, Leonardo Castriota	**Earthquake protection and preservation of medieval rock sacellum of San Michele in Verona, Italy** Massimo Donisi, Elena Manzoni, Paolo Caffaro, Andrea M.R: Pettinaroli	**Dynamic Assessment and Model Calibration of a Historic Masonry Villa with Structural Discontinuities** Luca Sbrogio	**Floor response spectra for the verification of secondary elements in masonry buildings** Tommaso Maria Viazzi, Stefania Degli Abbati, Serena Cattari, Sergio Lagomarsino
	Analytical study of Guadua bamboo connections with threaded steel rods used in the construction of vernacular houses in Ecuador Santiago Fernando Trujillo Tamayo, Jair Alexander Cisneros Rengifo, Emerson Julio Cuadros Rojas	**Addressing structural challenges in built heritage preservation: a digital approach to overturning masonries** Manlio Montuori	**Dynamic identification and FE model calibration of a monumental basilica** Waqas Qayyum, Nicola Cavalagli, Enrique García-Macías, Massimiliano Gioffrè, Vittorio Gusella, Chiara Pepi, Claudia Cerbai, Fabio Bianconi, Marco Filippucci, Filippo Ubertini	**Comparative Study of EFM and FEM Modelling Strategies to Assess the Seismic Response of Churches** Behrad Ghaffarpasand, Stefania Degli Abbati, Sergio Lagomarsino
	E-5: Repair and strengthening techniques **Finite Element Analysis of Bending Performance in Circular Timber Beams Near-Surface-Mounted FRP Plates** Huan Song, Qing Chun	**SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.** **EXPERIMENTAL AND ANALYTICAL STUDIES OF DIFFERENTIAL SETTLEMENTS ON UNREINFORCED MASONRY PIERS AND**	**SS-05: Exploring Digital Tools for the Maintenance and Repair of Historic Structures: Innovations and Applications** **A Pipeline for the Assessment of 1960s Church Buildings with Archival Research, Digital Surveying Tools**	**SS-10: Seismic assessment and retrofit of cultural heritage buildings in Balkan region** **The structural retrofitting of the Monastery St. Francis of Assisi on Kaptol in Zagreb**

	Experimental Evaluation of Mortise-and-Tenon Joints in Traditional Timber Frames Under Lateral Loads and Validation of Reinforcement Strategies Belén Jiménez, José Peña, Ramiro Bazáez, Francisco Quitral, Luis Pérez, Constanza Cornejo, Vicente Guzmán	**SPANDREL SPECIMENS, REPAIRED WITH GROUTING AND FRCM** Georgios Karanikoloudis, João B. Serra, Paulo B. Lourenço	**and Computer Vision: the Case of Our Lady of Stockel - Belgium (1962-67)** Femke Van der Meulen, Louis Vandenabeele, Samuel Dubois, Sven Sterken, Stephanie Van de Voorde	Boris Trogrlić, Damir Foretić, Filip Foretić, Ante Mihanović, Đuro Nižetić, Milko Batinić, Antonio Munjiza, Hrvoje Smoljanović, Ivan Balić, Ante Kelava, Ines Španiček Bićanić
		Numerical-experimental validation of masonry arches strengthened with PBO-FRCM composite using the Applied Element Method Mattia Calò, Nicola Scattarreggia, Ricardo Monteiro, Matteo Moratti	**Digital Investigation of Modern Building Elements: A Case Study on Facade Details of Munich's to be Demolished Main Building of the Central Station** Tuna Çapar, Rouven Simon Grom, Andreas Willy Putz	**Identification of critical elements of unreinforced masonry buildings for selection of optimal retrofit solutions** Ante Pilipović, Mario Uroš, Marija Demšić
	Investigation, Emergency Stabilization, and Repair of Timber Roof Trusses at the Washington County Historic Courthouse Elizabeth Campbell Manning, Sean Carlos Cotton	**Structural retrofit of Eastern Canada's existing masonry using geosynthetics: preliminary test results** Moustafa EL-Assaly, Gabriel Aubry, Sam Bhat, Mohamed Meguid, Daniele Malomo	**Digital Dong: heritage assessment, reality capturing and 3D modelling** Xiang Ren, Derong Kong, Huriye Armagan Dogan, Yuxiang Pang, Ming Wang	**COMPARATIVE SEISMIC ASSESSMENT AND RETROFIT STRATEGIES FOR INTERWAR AND POST-WORLD WAR II MULTI-RESIDENTIAL BUILDINGS IN SLOVENIA** Petra Prašnikar, Vojko Kilar, Simon Petrovčič
	Long-term behaviour of timber beams strengthened with near surface mounted CFRP bars and externally bonded steel plate Xi Chen, Qingfeng Xu, Mingqian Wang, Yubing Leng, Lingzhu Chen, Fuwen Zhang	**Reliable experimentally-informed predictive models for masonry structures strengthened with Composite Reinforced Mortar** Ingrid Boem, Natalino Gattesco	**From Crack to Code to Craft: Digital Repair and Fabrication Heritage** Laurence Crouzet, Adrian Leander Pöllinger, Silke Langenberg	**HISTORIC BUILDINGS AND MONUMENTS IN NORTH MACEDONIA – CHRONOLOGY OF MANAGERIAL AND RETROFITTING ASPECTS** Veronika Shendova
11:00am - 11:30am	Coffee-break			
11:30am - 12:30pm	**CE-2: Vernacular constructions: history, inspection, analysis, conservation**	**CE-4: Interdisciplinary case studies**	**E-1: Inspection methods, non-destructive techniques and laboratory testing**	**E-2: Numerical modelling & Structural analysis**
	A review at earthen buildings in the historic centers of Cartago and Santo Domingo de Heredia in Costa Rica Ileana Hernández-Salazar, Mauricio Guevara-Murillo	**Geotechnical Investigation of the April 2022 South Wall Collapse at Kuelap Fortress Using Limit Equilibrium Analyses** Miguel A Pando, Rafael Aguilar, Sebastian Aucca, Guillermo Zavala	**3D distinct element model updating of a masonry bell tower** Florin Cristinel Stan, Pietro Meriggi, Stefano De Santis, Arnaud Montabert, Gianmarco de Felice	**Seismic Behavior of Scaled-down Dry-Stone Retaining Walls: A 3D Numerical Study** Hussein OSMAN, Eric Vincens, Nathanael Savalle, Stephane Hans
	Structural Characteristics for Heritage Residential		**Rank Aggregation of Fundamental Frequency**	**Prediction of Modal Features for Different Damage Stages and**

Buildings in the Kingdom of Saudi Arabia
Ashraf Osman

Roadmap to seek an interdisciplinary solution for Kuelap Fortress
Viviana Moreno, Guillermo Jose Zavala, Miguel Angel Pando, Rafael Aguilar

Estimation Laws for Historic Towers
Alessio Crocetti, Raimondo Betti, Rosario Ceravolo, Hamid Imani Moghaddam, Gaetano Miraglia, Salvatore Russo, Linda Scussolini

Retrofit Methods of a Masonry Building
Maja Baniček, Mahmoud Shaqfa, Sara Vaing, Josip Atalić

Building on tradition: Optimizing dry stone masonry for earthquake resistance in Pakistan
Igor Tomic, Amjad Naseer, Mohammad Ashraf, Irshad Ahmad, Zahid Khan, Sheheryar Khan, Hamna Shakeel, Katrin Beyer

Integrating geosciences and earthquake engineering for the conservation of historic monumental buildings in Old Cairo: CoReng perspective
Marco Fasan, Chiara Bedon, Hesham E. Abdel Hafiez, Marco F. Funari, Hany M. Hassan, Michele Dilena, Fabio Romanelli

Dynamic Identification of Gopurams in South Indian Temples using Operational Modal Analysis
R Sharika, Arun Menon

Seismic Performance Assessment of Timber-Laced Masonry: A Numerical Study of Dhajji-Dewari and Kath-Kuni Walls
Keerthi Teja Harathi, Thainswemong Choudhury

Recommendations for the construction of land terraces with stone walls in earthquake-prone zones in the Andes
Sandra Santa-Cruz, Julio César Alcántara, Vladimir Ramos, Dominique Daudon, Marcial Blondet

Performance and Analysis of Historic Mass Masonry Forts and Their Components in Hurricanes
Heba Elsayed, Erin Frye, Michael Horst

Numerical modelling of damaged historical structures
Tomoki Nagata, Katrin Beyer, Savvas Saloustros

Modeling Strategy of Ancient Masonry Bridges Based on Masonry Structure Gap Image Recognition
Juncheng Han, Yin Shen, Shibing Dai, Yu Wang

E-5: Repair and strengthening techniques

SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.

SS-05: Exploring Digital Tools for the Maintenance and Repair of Historic Structures: Innovations and Applications

SS-10: Seismic assessment and retrofit of cultural heritage buildings in Balkan region

DYNAMIC TESTING OF A MASONRY BELL TOWER EQUIPPED WITH AMD SYSTEM AND STRENGTHENED WITH FRCM
Luca Albanesi, Numan Eren, Andrea Orgnoni, Davide Bolognini, Luca Grottoli, Andrea Penna, Paolo Morandi

Seismic strengthening of masonry piers with the FRCM system – Comparison of experimental and numerical results
Ivan Hafner, Tomislav Kišiček, Matija Gams

Advancing Built Cultural Heritage Conservation: Integration of Industry 5.0 Principles and Enabling Technologies
Alejandro Jiménez Rios, Rafael Ramirez, Margarita Petrou, Vagelis Plevris, Maria Nogal

Reconstruction of the Nin Bridges
Ante Buzov, Ante Mlinar, Ljubo Pavić, Ante Borovina

Shake table tests on a large-scale structure retrofitted with UNI-CAM: a novel seismic strengthening technology for fair-faced rubblestone masonry
STEFANO DE SANTIS, DOMENICO LIBERATORE, IVAN ROSELLI, ALESSANDRO VARI, OMAR ALSHAWA, GIANMARCO DE FELICE

IN-PLANE CYCLIC BEHAVIOR OF UNREINFORCED MASONRY WALLS WITH ARCH OPENINGS RETROFITTED WITH TRM
Erika Ortega-Guamán, Felipe Orduz, Luis Pérez-Pinedo, Cristián Sandoval

Integrated IFC protocols for Sustainable Conservation and Energy Efficiency of Historic Buildings
Tatiana Zanni, Ana Paola Rocca Vera, Oscar Roman, Maria Rosa Valluzzi, Elisa Mariarosaria Farella, Fabio Remondino, Paola D'Agaro

Seismic assessment of typical medieval stone masonry buildings in West Balkan
Mustafa Hrasnica, Senad Medić

Identification of seismic deficiencies in cultural heritage buildings using finite element analysis: A case study of Castle Trakošćan (Croatia)
Aanis Uzair, Ikramullah Qayyum, Lars Abrahamczyk, Davorin Penava

Strain-hardening geopolymer composites for strengthening historical brickwork masonry

IdentiTwin: defining the scope for the future development of Digital

Pull-out tests of steel anchors and spikes

	installed to solid brick masonry walls Enrico Garbin, Matteo Panizza, Nicolò Verlato, Francesca da Porto, Gilberto Artioli	Enrico Garbin, Matteo Panizza, Sergio Tamburini **Role of crystalline admixtures and silica fume on the self-healing effectiveness of lime-based TRM systems** Niki Trochoutsou, Liberato Ferrara	**Twins for heritage buildings in Costa Rica.** Jose Pablo Bulgarelli-Bolaños, María del Carmen Valverde-Solano, Ericka Solano-Fernández	**Seismic Behavior of Masonry Minaret: A Nonlinear Analysis of the Tabačica Mosque Minaret Using Extreme Loading for Structures Software** Faris Trešnjo, Naida Ademović, Mustafa Humo, Salko Kulukčija
	Experimental and numerical assessment of lateral in-plane response of an unreinforced masonry wall with arch-type openings Felipe Orduz, Erika Ortega-Guamán, Luis Pérez-Pinedo, Cristián Sandoval		**Integrating Investigative 3D Scanning Workflows for Adaptive Reuse Programming of Historic Structures** Randy Fernando	
12:30pm - 1:30pm	Lunch			
1:30pm - 2:30pm	Keynote Prof. Dina D'Ayala: Application of the ISCARSAH Guidelines to Assess Heritage Structures Exposed to Natural Hazards **Application of the ISCARSAH Guidelines to Assess Heritage Structures Exposed to Natural Hazards** Dina D'Ayala			
2:30pm - 4:00pm	CE-4: Interdisciplinary case studies	E-1: Inspection methods, non-destructive techniques and laboratory testing	E-2: Numerical modelling & Structural analysis	E-4: Structural Health Monitoring
	The Rehabilitation and Reuse of The Polytechnic's Old Canteen – Case Study Catalina Maria Bocan, Diana Giurea, Cristian Blidariu	**FRACTURE PROPERTIES OF MARBLE. THE CASE STUDY OF CARRARA BIANCO AND PROCONNESIO** Mila Cvetković, Salvatore Russo	**Finite Element Analysis of the Effect of Cladding on Historic Timber Covered Bridges** Madeleine Isabelle Fayle, Emily Carroll Painter	**The Garisenda tower in Bologna: assessing damage evolution over five years of SHM using nonlinear FEM, fiber optical strings, and the AE technique** Pedro Marin Montanari, Giuseppe Lacidogna, Stefano Invernizzi, Angelo Di Tommaso
	Heritage Interventions: Toward an Interdisciplinary Approach of Structural Conservation Imola Kirizsán, Martin Székely, Adrian Tudoreanu-Crișan	**Experimental Study on the Bond-Slip Behavior and Material Properties of Historical Reinforced Concrete (1912-1949) in China** Boxu Lin, Qing Chun	**Effect of dynamic load for the slopes of the Gediminas Hill** Šarūnas Skuodis, Mykolas Daugevičius, Jurgis Medzvieckas, Arnoldas Šneideris, Aidas Jokūbaitis, Justinas Rastenis, Juozas Valivonis	**Data Analysis for Heritage Structures: the monitoring system of the Dome of Santa Maria del Fiore** Francesca Marafini, Giacomo Zini, Alberto Barontini, Michele Betti, Nuno Mendes, Gianni Bartoli
	Modern methods for investigating Romania's historic churches after earthquake consolidations Marius Mosoarca, Mihai Fofiu, Filippo Casarin, Yohei Endo	**Pull-Out Test of a Historical Iron Tie Rod Anchorage System** Margarita Petrou, Dimos Charmpis	**Computational fluid dynamic analysis of wind pressure action on historic monuments: A case study of Ruins of St. Paul's** Ka Chon Lei, Chi Chiu Lam, Mun On Wong	**Integration of Structural Health Monitoring Technologies and Digital Twins within the Intelligent Circular Resilience Framework applied to the Seismic**
	Preservation and Enhancement of Tibetan Aga Soil Roofing: Deterioration and Application Evaluation	**Laboratory tests for the characterisation of a sedimentary arenaceous limestone used in the architectural heritage of Northern Italy**	**Numerical Modelling and Seismic Strengthening of a Stone Masonry 14th**	

	Based on Laboratory Analysis and In-Situ Monitoring Experiments Shi Hu, Yike Cai, Wenyi Dai, Shihu Feng, Fei Lu, Xiaomeng Ding	Giuliana Cardani, Michela Rossi, Dionysios Bournas	**Century Tower: The Galata Tower İstanbul** Barış Güneş, Muhammed Akgül, Mehmet Selim Ökten, Burcu Balaban Ökten	**Evaluation of Heritage Buildings** Hector Aroquipa, Alvaro Hurtado, Christiam Angel
	Integrated tools for cultural heritage conservation: Application at the Monastery of Batalha Inês Bourgeois, Victor Ferreira, Hugo Rodrigues	**STRUCTURAL PERFORMANCE OF RESTORED MARBLE AFTER COLLAPSE** Mila Cvetković, Salvatore Russo	**Structural features and preliminary FE modelling of the Coccoliera building of San Leucio historical site in Caserta, Italy** Ebrahim Aminifar, Marco Ciano, Mattia Zizi, Corrado Chisari, Gianfranco De Matteis	**On the digital twinning of cultural heritage structures: The Garisenda tower in Bologna, Italy** Antonio Maria D'Altri, Giovanni Castellazzi, Said Quqa, Gregorio Bertani, Luca Patruno, Francesco Ubertini, Chiara Dellacasa, Stefano de Miranda
	Challenges and experiences in design of roof covering structures for protection of two archaeological sites in Mexico: Teotihuacán and Templo Mayor Oscar Minor Garcia, Hector Mendoza Olivares, Gerardo Alavez Perez, Miguel Gallardo Contreras	**Direct identification of softening constitutive properties of brittle materials from full-field strain measurements** Marialuigia Sangirardi, Miles R.W. Judd, Sinan Acikgoz	**Research on the stability mechanism and reinforcement measures based on the analysis model of an ancient wooden pagoda** Jintai Liu, Jiaqi Ge, Xinqun Yong, Xingang Liu, Xinzheng Wang, Zhang Ling	**Traffic-induced vibrations and cultural heritage: the monuments in Rome** Dario Rinaldis, Paolo Clemente, Giovanni Bongiovanni, Giacomo Buffarini
				Vibration Monitoring of the Royal Exhibition Building, Melbourne Australia Justin Hettinga, Dayne Davis, Dan Blake
	E-5: Repair and strengthening techniques **Mechanical performance of a thermally enhanced nature-based CRM system for integrated seismic and energy retrofitting** Luca Penazzato, Rogiros Illampas, Daniel V. Oliveira	**SS-04: Challenges for the mechanical characterisation of masonry material** **Mechanical Properties of Masonry Structures in Portugal: New Analytical Curves for Structural Assessment** António Simões, Rita Bento, Tiago Miguel Ferreira	**SS-15: Challenges and possible directions toward harmonized guidelines for the modelling of unreinforced masonry addressed to the seismic safety assessment according to Codes** **Harmonizing computational methods for the seismic assessment of Unreinforced Masonry structures: the Dutch case** Francesco Messali	**SS-21: Seismic assessment and retrofit projects in Switzerland** **Seismic assessment of cultural-historical buildings in Switzerland - practical experience on organization, procedure, methodology and calculation** Yves Mondet, Pia Hannewald, Frank Löbbecke
	Enhancing durability and structural performance through Reticulatus reinforcement using titanium wires Antonio Borri, MARCO CORRADI, Allen Dudine, Andrea Giannantoni, Andrea Zampa, Jill Adkins	**Effective properties of masonry** Hernán Alfredo García, Juan Carlos Jimenez, Jose Fernando Vázquez **A comparison between experimental outcomes and discrete element modelling for the**	**Key lessons from the Italian ReLUIS "Benchmark project": comparing different nonlinear modeling approaches for the**	**Refurbishment of the Leuenhof in Zurich** Andreas Galmarini, Wolfram Kübler, Theus Tilla

	Design and test of stainless-steel rebars to repair and reinforce masonries Beatriz Hortigon, Fernando Ancio, Jose Maria Gallardo, Tamara Aguilar, Mirko Kunowsky, Esperanza Rodriguez-Mayorga	**evaluation of failure modes of masonry under shear actions** Nandini Priya Thatikonda, Daniele Baraldi, Giosuè Boscato, Antonella Cecchi	**seismic assessment of URM buildings** Serena Cattari, Francesco Parisse, Elia Acconcia, Valentina Buonocunto, Marco Postiglione, Franceco Cannizzaro, Giovanni Castellazzi, Antonio Maria D'Altri, Stefania Degli Abbati, Alice Di Primio, Carlo Filippo Manzini, Paolo Morandi, Rui Marques, Giuseppe Occhipinti, Massimo Petracca, Luis Silva, Giuseppe Brandonisio, Bruno Calderoni, Ivo Caliò, Guido Camata, Paulo B. Lourenco, Gabriele Milani, Stefano De Miranda, Fulvio Parisi, Guido Magenes	**Seismic retrofitting of schools in Basel: a practicing architects' perspective** Thomas Thalhofer, Roula Moharram
	Retrofit of Full-Scale Laterally Damaged Prestressed Concrete Girder Using Externally Bonded CFRP Composite: An Experimental Study Haitham Abdelmalek, Francis Ashun, Mohamed ElGawady	**Experimental validation of a detailed micro-model with shear triplet tests** Kristian Falkjar, Jan Kubica **Parametric Study on the Influence of Core Capping in Assessing the Compressive Properties of Historical Masonry** Navid Vafa, Uday Jain, Rita Esposito, Paul Korswagen Eguren, Jan Rots		**Restoration and seismic retrofitting of the SBB Rotonde Brig** Dr. Walter Borgogno, Thomas Eggenberger, Stefan Eyyi
	Tensile characterization of basalt FRCM composite in double-layer applications Tommaso Baroni, Francesca Ferretti, Claudio Mazzotti **Numerical analysis of shape memory alloys strengthening of historical masonry** Kacper Wasilewski, Artur Zbiciak	**Numerical investigation about the orthotropic shear strength of a periodic masonry arrangement** Luigi Salvatore Rainone, Luis Carlos Martins Da Silva, Giuseppina Uva, Siro Casolo		
4:00pm - 4:30pm	Coffee-break			
4:30pm - 6:30pm	**C-1: Digitalization for documentation and management**	**E-1: Inspection methods, non-destructive techniques and laboratory testing,**	**E-2: Numerical modelling & Structural analysis**	**E-3: Seismic vulnerability & Risk**
	ReVault: a parametric tool for the geometrical analysis of historical vaulted structures Mathias Häcki, Marius Pfister, Louis Vandenabeele	**Seismic Assessment of Ancient Heritage Structures Using Structure-from-Motion Photogrammetry. Application to San Juan Bautista Church built on Inca Foundations** Emerson Cuadros-Rojas, Savvas Saloustros, Nicola Tarque, Luca Pelà	**Out-of-plane Dynamic Analysis of Masonry Façades Interacting with Sidewalls: Comparison of Discrete Macro-Element and Rigid-Block Modelling** Linda Giresini, Bartolomeo Pantò, Claudia Casapulla	**Assessment of Seismic Vulnerability of Masonry Churches through a Comparison between Territorial and Global Analyses** Giovanna Longobardi, Antonio Formisano
	METHODOLOGICAL PROPOSAL FOR THE ANALYSIS OF LARGE SCALE RIBBED VAULTS FROM POINT CLOUDS Agustí Costa-Jover, Amparo Nuñez Andrés, Felipe Buill Pozuelo, Sergio Coll Pla, David Moreno Garcia	**Integrating geoinformatics and finite element modelling for structural assessment of**	**Numerical Parametric Investigation of Pounding between Adjacent Unreinforced Masonry Façades Using the Discrete Element Method**	**An integrated approach to seismic and coastal flood risk assessment for historical buildings** Željana Nikolić, Toni Kekez, Elena Benvenuti

a cultural heritage monument
Nicholas Kyriakides, Renos Votsis, Orestes Marangos, Dimitrios Skarlatos, Giorgos Kafataris, Stylianos Hadjipetrou, Athos Agapiou, Dina D'Ayala, Alice Tavares Costa, Branka Cuca

Yuni Azhari, Anastasios I. Giouvanidis, Jason M. Ingham

Digital platform for multi-hazard vulnerability assessment of heterogeneous ur-ban historical centres. Application to the city of Valparaíso (Chile).
Marcela Hurtado, Belén Jiménez

Domain Expert 2.0: AI-driven Documentation of Domain Expertise in Built Heritage
Ishita Khatri, Yamini Patankar, Rafael Bischof, Bernd Bickel, Robert Flatt

A discontinous model for the selection of ground motion records for the out-of-plane shake table campaign on masonry structures
Dario Vecchio, Babar Ilyas, Nuno Mendes, Paulo Lourenco

Integrated strategies for the structural evaluation: the ancient columns of the Basilica of St. Peter and Paul in Agliate.
Antonella Saisi, Mattia Previtali

PROPOSED SOLUTIONS FOR THE AUTOMATED EVALUATION OF LASER SCAN DATA
Gunnar Siedler, Sebastian Vetter

Integrated Methods and Technologies for the Safeguarding of Parish Churches in the Lunigiana
Martina Colapietro, Valentina Bonora, Barbara Pintucchi

In-plane anisotropic homogenization of brittle, irregular masonry using FEM with cohesive zone joint elements
Michel CHALHOUB, Amade POUYA

Comparative study of unreinforced masonry walls using experimental and average mechanical properties
Ambareesh Kumar, Kumar Pallav

Applying AI/ML to the Assessment of Earthquake Damage to Heritage Structures
Satwant S. Rihal, Hisham Assal

Discontinuum-Based Analysis of a Damaged Unreinforced Masonry Building Stabilized via Steel Ties
Anushka Mukherjee, Andrei Farcasiu, Douglas La Prairie, Tom Morrison, Bora Pulatsu

Multi-hazard fragility assessment of cultural heritage structures using Bayesian networks
Laura Ierimonti, Fernando Ávila, Enrique García-Macías, Ilaria Venanzi, Nicola Cavalagli, Filippo Ubertini

STRUCTURAL INVESTIGATION OF SÃO BENTO DA VITÓRIA CHURCH USING NON-DESTRUCTIVE TESTS AND NUMERICAL ANALYSIS
Daniel Aguado, Arezu Feizolahbeigi, Monica Pranjic, Jakob Oreb

Potential and Limits of Pointclouds as an Architectural Design Tool for small sized Historic Monuments through the case study of modernist Atelier house of Carl and Margrit Roesch in Diessenhofen, Switzerland
Martin Roesch, Korinna Zinovia Weber, Nicola Graf

Stability Assessment of Masonry Retaining Walls under Dynamic Loads: An Advanced Yield Design Approach with Displacement Evaluation
Hicham Cherifi, Anne-Sophie Colas, Denis Garnier, Benjamin Terrade, Stanislas Antczak

CHALLENGES, TOOLS, AND STRATEGIC APPROACHES FOR THE EVACUATION PLAN DESIGN.
Letizia Mancini, Giorgia Cianchino, Giuseppe Brando, Maria Giovanna Masciotta, Enrico Spacone

Data-Driven Seismic Assessment: Efficiently Estimating Demand and Compliance for Existing Buildings
Yves Reuland, Andrea Hauenstein, Panagiotis Martakis

An Integrated Methodology of Digital Measurement for Heritage Architecture - Case of Chinese Masonry Pagoda
Jin Shang

Calibration of DEM models: some useful benchmarks
Elizabeta Šamec, Petra Gidak, Antonia Jaguljnjak Lazarević, Damir Lazarević

Risk-based seismic rehabilitation of existing bridges: Application to an existing bridge in Switzerland
Anastasios Tsiavos, Nathan Bender, Bozidar Stojadinovic

World Heritage Historic Construction as Narratives of Climate Change: from historical to structural analyses
Giusy Pappalardo, Samuele Andreoni, Marco Armiero, Corrado Chisari, Gianfranco De Matteis, Alexander C.Q. Jansen, Rosina Iaderosa,

Towards an integrated software tool for 3D and 2D rigid block analysis of

		Domenico Iovane, Giuseppe Occhipinti, Ashraf Osman, Bartolomeo Panto, Gillian Rennie, Mattia Zizzi	historical masonry structures Francesco P.A. Portioli Local failure mechanisms in unreinforced masonry buildings: a sensitivity analysis of the activation load factor Luca Umberto Argiento, Francesca Ceroni, Claudia Casapulla	Seismic fragility assessment of masonry building aggregates prototypes of a typical historical centre in the Basilicata region of Italy Roberta Di Chicco, Antonio Formisano
	E-5: Repair and strengthening techniques HISTORIOGRAPHY AS INTERVENTION TOOL: [RE] BUILDING TECHNOLOGY OF THE ISFAHAN SHAH MOSQUE EYVAN Ali T. Dinani, Solmaz Sadeghi, PAULO B. LOURENÇO	SS-14: Strategies and challenges in quantifying uncertainties for predicting the response of masonry buildings Quantifying model-error uncertainty in the seismic assessment of unreinforced masonry buildings using equivalent frame models Mathias Haindl, Ian F. C. Smith, Katrin Beyer	SS-18: Round-table on grouting application methodology and its impact on the efficiency of the intervention. Session in the memory of Prof. Giorgio Macchi. DESIGN AND APPLICATION OF HYDRAULIC GROUTS TO THE CAPPELLA GUARINIANA DELLA SINDONE, TORINO Giorgio Macchi, Stefano Macchi, Androniki Miltiadou, Elizabeth Vintzileou, Anna Kalagri	SS-21: Seismic assessment and retrofit projects in Switzerland Interdisciplinary guidelines for “better” retrofitting solutions of historic buildings in Switzerland Friederike Braune
	The structural analysis and strengthening of the chapel of St. John Nepomucene in the Sarny Castle Krzysztof Raszczuk, Jerzy Jasieńko, Piotr Frąckiewicz, Adam Marek	Evaluating uncertainties in rocking models: the case of the Dickson chimney in Montreal Giacomo Destro Bisol, Daniele Malomo	Injection techniques on stone masonry walls to improve mechanical properties and evaluation of its effectiveness through non-destructive sonic test Murat Alaboz, Filippo Casarin, Aysenur Birel, Mehmet Selim Okten	Seismic retrofitting of a listed corner building with a 500-year-old history Roger Dietschweiler, André Oliveira, Markus Zimmermann, Sven Schuerch, Stefan Wülser, Agnieszka Latak
	A Next Step Toward Improving the State of the Practice for Heritage Structures in a Seismic Context Terrence Paret	Bayesian classification of damage modes in existing masonry buildings from descriptive vulnerability factors Camilla Dori, Luca Sbrogiò, Maria Rosa Valluzzi	Influence of the Nature of Binding Agents and Fillers on the Stability and Effectiveness of Lime-based Grouts Ioanna Papayianni	Museum für Gestaltung, Zürich Nicolas Köller, Dr. Martin Deuring, Ruggero Tropeano
	A Review of Challenging Structural Restoration Decisions for the New Mosque (Yeni Cami) in Malatya, Turkey Ahmet Turer	On the required number of records for the estimation of the “true” mean seismic demand of masonry building typologies Daniel Caicedo, Igor Tomić, Shaghayegh Karimzadeh, Vasco Bernardo, Katrin Beyer, Paulo B. Lourenço		Seismic assessment and avoided retrofit of historical URM Building in Zurich, Switzerland Julian Pernstich
	Rescue of Ruined Structures. Case Studies in Timber Adrian Tudoreanu-Crișan, Imola Kirizsán			Less is more: Conservation of the existing state as seismic retrofitting strategy for the historical weir at Winznau on the Aare river.

	Conservation experimental study project in the Holy Land - Application of hot lime mix in the Knight Templars Fortress inner wall Nabil Maklada, Yotam Asscher, Avi Mashiah	**Dynamic response of masonry aggregate buildings with different degrees of connection and floor deformability** Sofia Villar, Fabio Di Trapani, Marilisa Di Benedetto, Massimo Petracca, Guido Camata		Thomas Wenk, Hans Steiner, Armand Fürst
		Toward Shake Table Testing: Preliminary Numerical Study on Seismic Retrofit Interventions for Masonry Buildings Marilisa Di Benedetto, Sofia Villar, Fabio Di Trapani, Alessandra Marini, Chiara Passoni, Andrea Belleri, Guido Camata, Enrico Spacone		
		Mechanics-based modelling of the seismic out-of-plane dynamic response of unreinforced masonry gables Ziwei Dai, Satyadhrik Sharma, Nicolò Damiani, Francesco Graziotti, Francesco Messali		

Date: Wednesday, 17/Sept/2025

8:30am - 9:00am	Registration & Coffee			
9:00am - 10:00am	Keynote Prof. Vasilis Sarhosis: Novel approaches for the structural inspection of historic structures			
10:00am - 11:00am	**C-1: Digitalization for documentation and management** **Development of an interactive digital application to manage vernacular built heritage** Juan Arias Tapiero, Hugo Pires, Javier Ortega, Graça Vasconcelos **Methodology of Constructing a 3D Database for Historic Village Renovation** Dan Hu **Virtual Heritage Journeys: Exploring Digital Conservation of Fujian Tulou and Sangiran** Qixian Xu, Syifa Adiba **Digital portal for documenting and promoting the Algerian railway heritage** Chahineze Slimani, Boussad Aiche, Mohammed Ilyas Bouteldja	**C-2: Climate change: adaptation & mitigation** **Climate Change Impacts on Cultural Heritage: Open Challenges and Lessons Learned** Mariapaola Riggio, Rebecca Napolitano, Angela Curmi, Tiago Miguel Ferreira, Laura Pecchioli, Chiara Ferrero, Stacy Vallis, Xiaolin Chen, Qianli Dong, Giorgia Giardina, Maria Bostenaru Dan **Pro-active adaptation of existing masonry buidings in response to the climate change induced risk of subsidence.** Brunella Balzano, Shahram Sharifi, John Sweeney, Glen Thompson **Addressing climate change in Historical Urban Built Environment: a holistic approach to derive dynamic flood risk in open spaces** Tiago Miguel Ferreira, Gabriele Bernardini, Gessica Sparvoli, Enrico Quagliarini **Assessing the effectiveness of moss- and herb-based natural capping on the Northern Ming Great Wall of China** XINYU JIANG, SOKYEE YEO	**C-3: History of construction and building technology** **CHARACTERIZATION AND COMPARISON OF RED AND YELLOW BRICKS FROM CZECH HISTORIC STRUCTURES** Pavla Bauerová, Dita Frankeová, Martin Hemala, Pavla Náhunková, Zuzana Slížková **Comparative Study of Stones from an Ancient Roman Temple and Two Quarries in Turkiye** Ece Erdogmus, Engin Aktas, Joshua Freedland, Ertugrul Turker Uzun **Mineralogical Characterization and Strength Assessment of Masonry from UNESCO World Heritage Site (4th–13th Century CE)** Vaibhav Singhal, Nenshol Anand, Swathy Manohar **Brick Manufacturing in Barcelona during the 19th and 20th centuries and its influence on residential structures** Albert Cabané, Cossima Cornadó	**C-5: Management of heritage structures and conservation strategies** **Principles of sustainable conservation of archaeological sites in river valleys** Miloš Drdácký, Tomáš Drdácký **The need for guiding lines in restoration and heritage coherence in Romania** Cristina Alexandra Drăghici, Iasmina Onescu **From structural diagnosis to a public plan of valorisation: the ancient village of Vogogna (Val d'Ossola, Italy)** Laura Bolondi, Lorenzo Cantini, Mattia Previtali, Riccardo David De Ponti **Is a heritage structure protected against demolition when listed on a register of monuments? - case study of a masonry viaduct** Arkadiusz Kwiecień, Łukasz Bednarz, Marek Skłodowski, Bożena Boba-Dyga, Łukasz Hojdys, Piotr Krajewski, Filip Pachla
	E-1: Inspection methods, non-destructive techniques and laboratory testing **EVALUATION OF HYGROTHERMAL AND THERMOGRAPHIC BEHAVIOR IN A HERITAGE EARTH BUILDING: A CASE**	**E-1: Inspection methods, non-destructive techniques and laboratory testing** **Preliminary results of non-destructive testing for quality control of glued wooden prostheses in conservation engineering**	**E-2: Numerical modelling & Structural analysis** **Numerical modelling of a masonry cross-vaulted church bay for defining the test setup of ERIES project "REVAULTs"** Chiara Cirabisi, Chiara Calderini, Nuno Mendes	**SS-9: MSc SAHC 2023-2025 graduates & poster competition** **Evaluation of the Broumov parish house failure, its causality, and some ideas of remediation**

	STUDY IN THE ARCHITECTURE OF THE HISTORIC CENTER OF LIMA - PERU MARIELLA DIAZ-SANTIVAÑEZ	Marieta Núñez-García, Guillermo Íñiguez-González		ATHINA PAPADIAMANTI, PETR KABELE, MARTIN VALEK
	Analysis of Full-Scale Experiments on Masonry Structures using a Motion Capture System and Digital Image Correlation Suzanne Léonard, Julien Archez, Anne-Sophie Colas, Denis Garnier	Vibration Measurements of Timber Floors in Heritage Buildings and Serviceability Requirements Kamer Ozdemir, Eleni Smyrou, Ihsan E. Bal	Seismic Assessment of an Unreinforced and Reinforced with TRM Masonry Cross-Vault using the Applied Element Method Martina Cogliano, Chiara Casotto, Giulia Grecchi, Matteo Moratti, Gian Michele Calvi	Taxonomy of structural failures triggering progres-sive collapse of masonry arch bridges: The case study of a multi-ring arch bridge ARISTEIDIS DALIANIS, LARISA GARCIA RAMONDA, PERE ROCA, LUCA PELA
	Vibrometric investigation of museum artifacts and exhibition-cases under the influence of local traffic by means of magnified motion Eugenia Verrigni Petrei Castelli, Vincenzo Fioriti, Miriam Lamonaca, Luigi Sorrentino	Application of X-ray computed tomography in architectural monuments on the example of the study of structural elements of the wooden buildings of the German Nazi concentration and extermination camp at Majdanek. Wojciech Korycinski, Paweł Kozakiewicz	Comparison of experimental results and numerical simulations to assess the relevance of geometrical imperfection and local behavior in the failure of masonry arches on spreading supports Orsolya Gaspar, Vittorio Paris, Istvan Sajtos	STRUCTURAL INVESTIGATION OF SAO BENTO DA VITORIA CHURCH USING Non-DESTRUCTIVE TESTS AND NUMERICAL ANALYSIS Arezu Feizolahbeigi, Monika Pranjic, Jakov Oreb, Daniel Aguado, Kardelan Degermenci, Daniel Oliveira
	Subsurface Defect Detection in Concrete Elements using Infrared Thermography Lokeswari Malepati, Suriya Prakash S, Vedhus Hoskere, Nagarajan Ganapathy	A Digital Image Correlation (DIC) Study of Crack Evolution in Dou Components under Vertical Compression PANPAN LIU, SOKYEE YEO, FUKUDA HIROATSU	Determining the limit load and collapse mechanism of masonry vaults and domes with non-linear FEM-based model Kristóf R. Varga, Tamás Ther	
11:00am - 11:30am	Coffee-break			
11:30am - 12:30pm	C-1: Digitalization for documentation and management	C-3: History of construction and building technology	C-5: Management of heritage structures and conservation strategies	CE4: Interdisciplinary case studies
	The Transformation of Conservation Strategies in a Digital Era: The Case for St Paul's Anglican Pro-Cathedral Charlene Jo Darmanin, Guillaume Dreyfuss, Rebecca Dalli Gonzi, Konrad Buhagiar	Correlation of Architectural, Metrological, and Structural Analysis: The Case of the 13th-Century Cathedral in Chełmża (Northern Poland) Maciej Prarat, Peter Krušinský, Krzysztof Raszczuk, Krzysztof Wroński	Curating Technology: Technological Navigation of the Intangible Environment Ashley Kochiss, Rebekah Coffman	The State of Preservation and Effects of a Thorough Renovation of a Historic, Half-timbered Church Anna Maria Hoła
	Multidisciplinary Research Methods for the Documentation of Vulnerable Historic	Reviving Tradition: The History and Techniques of Construction with Local Materials in	Developing a Long-term Capacity-Building Strategy for Conservation Professionals Working in Seismic Areas Elena Macchioni, Benjamin Marcus, Alessandra Sprega, Rafael Aguilar, Mauricio	Conservation research of the only survived complex of regional timber construction (Umgebindehaus) in Upper Lusatian village Wigancice-Visniova

	Structures in Banská Štiavnica Marián Marčiš, Katarína Terao Vošková, Marek Fraštia	**Morocco's Al-Haouz region** Meryam Ajari, Nabil Bouddount, Anass Kariouh	Gonzales, Paulo Lourenço, Claudia Cancino	Agnieszka Janas, Magdalena Żmudzińska-Nowak, Jan Kubica, Janusz Brol
	Goed de Tuercqs in Kruisem: A 14th Century Hidden Hall House in a Vernacular Farmstead Ann Verdonck, Marjolein Deceuninck	**Historical buildings as a source of research on historical length units and proportions in the flow of time.** Peter Krusinsky, Katarina Terao Voskova	**An Enhanced Heritage Protection System for Built Cultural Heritage Management** Natasa Jurgec Gurnick	**Structural identification and analysis of historical timber barn frames** Moriah Hughes, Branko Glisic
	Virtual Reconstruction for Heritage Conservation: Integrating Geometric Digital Twins at Ribnica Fortress Nikola Jelenić	**Traditional and modern use of rubble stone in cementitious wall construction** Jakov Oreb, Igor Tomić, Katrin Beyer	**Built cultural heritage: assessing and mapping the vulnerability for preventing loss** Alessia Vaccariello	**Bringing together contruction heritage and structural safety - Wangduephodrang Dzong Utse in Bhutan** Andreas Galmarini, Daniel Gsell, Nagtsho Dorji
	E-1: Inspection methods, non-destructive techniques and laboratory testing	**E-2: Numerical modelling & Structural analysis**	**SS-07: New perspectives in Archaeoseismology**	**SS-11: Earthquake assessment of historical monuments with arches, vaults, domes, irregularities : Case studies and advances in research**
	Comprehensive Pre-Disaster Documentation for Conservation of 14th–16th-Century Ottoman Baths in Seferihisar, Türkiye Zeynep Özkaya İlbey, Tuğçe Aydınalp, Nihan Bulut, Taygun Uzelli	**Numerical simulation of the structural behaviour of the Pisa Cathedral dome** Francesco Barsi, Riccardo Barsotti, Stefano Bennati, Maria Girardi, Cristina Padovani, Daniele Pellegrini		**Modeling Masonry Arches Using Rigid Block Programming within the OpenSees Framework** Ivana Božulić, Qianqing Wang, Francesco Vanin, Katrin Beyer
	NON-DESTRUCTIVE TEST (NDT) FOR INSPECTION AND DIAGNOSIS USING REMOTE PILOTED AIRCRAFT SYSTEMS (RPAS) IN HERITAGE BUILDINGS Milena Elizabeth Dzib-Rodriguez, Pedro Cortez-Lara, Andres Antonio Torres-Acosta	**STRUCTURAL ASSESSMENT OF THE MASONRY VAULTS OF ST. ANNE'S CHURCH IN WARSAW** Krzysztof Grzyb, Łukasz Drobiec, Jakub Zając, Jan Biernacki		**An automatic procedure to simplify nonlinear static analysis of curved masonry structures** Alessandro Gandolfi, Natalia Pingaro, Martina Buzzetti, Gabriele Milani
	Towards Data-Informed Modelling of Historical Masonry Structures: A Questionnaire-Based Approach for Spatial Characterisation of Mechanical Properties Annalaura Vuoto, Marco Francesco Funari, Paulo B. Lourenço	**Performance of calcarenite masonry barrel vaults: Experimental investigation and DIC informed refined numerical simulation** Filippo Campisi, Marielisa Di Leto, Marilisa Di Benedetto, Fabio Di Trapani, Calogero Cucchiara, Lidia La Mendola		**Numerical Study on the Effect of Joint Stiffness on the Seismic Response of Dry-Joint Masonry Arches Subjected to Support Displacements** Chiara Ferrero, Francesco P. A. Portioli, Chiara Calderini
		Rotational capacity of masonry vaults as a stability verification		

	Structural Health Assessment and Rehabilitation of Heritage Mahabat Khan Mosque Peshawar Muhammad Rizwan, Talha Rasheed, Muhammad Fahad, Muhammad Tauseef, Muhammad Shoaib Khan	**Omar Moreno Regan**		**Comparison between micro- and macro-finite element modelling of masonry arches and vaults** Alessia MONACO, Samuele FAINI, Luca FACCONI, Emanuele GANDELLI, Fiammetta VENUTI, Marco ALFORNO, Fausto MINELLI
1:30pm - 2:30pm	Keynote Prof. Rafael Aguilar: Data driven structural diagnosis of historical constructions			
2:30pm - 4:00pm	**C-3: History of construction and building technology**	**E-2: Numerical modelling & Structural analysis**	**E-4: Structural Health Monitoring**	**E6: BIM technologies**
	Medieval and Early Modern Roof Structures over Rural Fieldstone Churches in Farther Pomerania and the Neumark, Poland. The case study of the collar beam roof with king posts from 1583 over the church in Mieszewo Ulrich Schaaf	**Out-of-Plane Seismic Response of Masonry Churches through Nonlinear Static Analysis** Federica Del Carlo, Silvia Caprili, Pere Roca	**Threshold effect in the Fiedler eigenvalue used as collapse signal for a masonry building during a seismic test** VINCENZO FIORITI, EUGENIA VERRIGNI PETREI CASTELLI, ALESSANDRO COLUCCI, IVAN ROSELLI	**Development of Digital Twins for monitoring Heritage structures based on a BIM-FEM framework** Francesca Meligeni, Pietro Croce, Marco Giorgio Bevilacqua, Virginia Miele, Petrica Marius Hurjui, Piergiuseppe Rechichi
	A Survey of Medieval Roof Structures on Churches of the Diocese of Växjö, Sweden Carl Anders Johannes Thelin, Karl-Magnus Melin, Mattias Hallgren, Robin Gullbrandsson	**Structural analysis of the 17th century church partially destroyed and rebuilt during World War II** Jan Kubica, Janusz Brol, Agnieszka Janas, Bernard Kotala, Marek Węglorz	**Innovative Displacement Calculation Techniques: A Comparative Analysis of Velocity and Acceleration Data Integration for Structural Monitoring** Hamid Imani Moghaddam, Salvatore Russo	**From Point Cloud data to Digital Twin: a semi-automated procedure for generating FEM and BIM models of historical structures** Pasquale Guarino, Andrea Meoni, Enrique García-Macías, Matteo Castellani, Fabio Antonini, Filippo Ubertini
	A Typo-structural Exploration on the Monumental Portals of Sinan's 16th-Century Ottoman Mosques in İstanbul Bahar Elagöz Timur	**Preliminary seismic assessment of Troia Cathedral, Italy** Giovanni Franco, Andrea Battisti, Omar AlShawa, Luigi Sorrentino, Domenico Liberatore, Daniela Addessi	**Comparison of low-cost structural health monitoring systems in two historic Canadian places of faith** Alex R. Carpenter, Thomas E. Morrison, Sonya Burrill, Fae Azhari	**Advancing BIM-to-FEM automation: an enhanced framework for the structural analysis of unreinforced masonry buildings** Maria Laura Leonardi, Letizia Martinelli, Stefano Cursi, Elena Gigliarelli, Miguel Azenha, Daniel Oliveira
	"PASSEGGIATA DEL BELVEDERE" -PALAZZO REALE: SYSTEM RESISTANT TO VARIABLE SETTINGS Michele Candela, Gerardo Antoniello, Alfredo Galasso, Paolo Mascilli	**Preliminary seismic assessment of Santa Maria degli Angeli Church, Civita di Bagno (AQ), Italy** Francesca Pompili, Giulia Angelucci, Omar AlShawa, Fabrizio Mollaioli, Domenico Liberatore	**Proposal of energy harvesting from metro-induced vibrations in historic cities** Yohei Endo, Eriko Kusunoki, Kosei Nomoto, Còssima Cornadó, Ramon Dilla Martí, Kou Machino, Rikako Kato, Anna Ramon Tarragona	**Leveraging HBIM for Multidisciplinary Project Management of Historic Earthen Buildings: The case of**
		Numerical models for seismic assessment of masonry churches		

Reflections on Ancient Egyptian mud-brick Vaults: A Structural Necessity, Constructional Facility or a Symbolic Choice? Luis Miguel Carranza Peco, Omar Kassab, Manuel Fortea Luna, Linda Chapón	Roselena Sulla, Michele D'Amato, Rosario Gigliotti, Domenico Liberatore **The Templar church of San Bevignate in Perugia: investigation and numerical modeling** Alessia Abbozzo, Giulio Castori, Emanuela Speranzini	**Traditional and innovative techniques for existing buildings monitoring** Antonella Ranaldo, Anna Lo Monaco, Michele D'Amato, Antonella D'Alessandro, Rosario Gigliotti, Marius Mosoarca	**Hotel Comercio in Lima, Peru** Elena Macchioni, Rafael Aguilar, Mauricio Gonzales, Carlos Yaya, Nadia Sanchez, Mirna Soto, Daniel Torrealva, Ricardo Vivar, Eleanor Phetteplace, Caludia Cancino
Historic roof structures in the western part of Romania – structural layout and construction techniques Alexandra Keller, Emanuel Tamas		**Satellite Observations for Linear Heritage Assets Conservation: The case of the Ancient City Walls of Pisa, Italy** Laura Vignali, Niccolò Belcecchi, Anna De Falco, Roberta Marini	**Use of Information Technologies and Historical Building Information Modelling (HBIM), Harran Example** Olcay C. Özdemir, Ozge Ogut, Seydi Yüzgül
			An HBIM-based protocol for damage classification and severity assessment through monitoring Maria Parente, Nazarena Bruno, Federica Ottoni
SS-06: Advancements in conservation practices for historical infrastructure: inspection, monitoring, structural analysis, and intervention	**SS-11: Earthquake assessment of historical monuments with arches, vaults, domes, irregularities : Case studies and advances in research**	**SS-12: Countable vs uncountable: the impact of construction history, materials and technologies on the structural behaviour of ancient buildings**	**SS-16: Interventions on heritage structures: lessons learned from past earthquakes**
Evaluating the relevance of modelling the soil block surrounding masonry earth-retaining structures in their structural assessments under traffic loads Satyadhrik Sharma, Michele Longo, Francesco Messali	**Failure mechanisms of arches, vaults and domes in the sacral architecture after the recent earthquakes in continental Croatia** David Anđić, Juraj Pojatina, Mislav Stepinac, Monika Pranjić	**Restoration of the 20th century with reinforced concrete integrations: knowledge and preservation** Micol Schiaffini, Carla Bartolomucci	**The effectiveness of recent interventions verified by the facts: churches in Emilia damaged by the 1996 and 2012 earthquakes** Elena Zanazzi, Eva Coïsson
Dynamic Characterization Through Ambient Vibration Monitoring Using Synchronized Trominos – Case Study of Venice's Bridges Hamid Imani Moghaddam, Salvatore Russo	**Embedded Steel Ties – The Hidden Superpower of Historic Masonry Arches and Domes** Juraj Pojatina, David Anđić, Monika Pranjić, Ivan Manović	**The seismic vulnerability of the archaeological heritage: proposal of a qualitative-quantitative speditive assessment model** Elisabetta Montenegro, Adalgisa Donatelli	**Domino Collapse in Urban Settings: An 19th Century Mosque Caused Collapse During the 2023 Kahramanmaraş Earthquake Sequence** Abide Aşıkoğlu, Aldy Riza Dhiandra, Paul Korswagen, Fikret Kuran, Özgür Avşar
Site experimental characterization of the earthen masonry walls of the At-Turaif UNESCO	**Earthquake assessment of churches with ribbed cross vaults - practical examples** Francesco Vanin, Pia Hannewald	**The Impact of Masonry Patterns on the Structural Safety of Historic Masonry Structures** Simon Szabó, Marco Francesco Funari, Paulo B. Lourenço	**Constructive features and past reinforcements: a critical analysis of seismic damage in**

	site in Kingdom of Saudi Arabia Abdulrahman Alasim, Filippo Casarin, Daniele Fanciullacci, Patrizia Barucco, Gaetano Palumbo, Laura Nicolini	**Parametric Structural Investigation of Historic Masonry Domes: Case Study on Armenia's Churches** Araxi Malazian, Branko Glisic	**Design and construction process of small-scale models of masonry cross vaults** Alessia MONACO, Fiammetta VENUTI, Giulia PASQUALE, Chiara FERRERO, Marco ALFORNO, Emiliano MATTA, Chiara CALDERINI	**Parma masonry churches.** Lia Ferrari, Eva Coïsson, Camilla Privitera
	Incremental damage on masonry arch bridges subjected to high cycle fatigue loading Bowen Liu, Vasilis Sarhosis	**Evaluation of strengthening applied to brick and roman concrete masonry vaults in a Renaissance palace in Florence, Italy** Yohei Endo, Kou Machino, Jacopo Magi, Nicola Del Lama, Rikako Kato	**Impact Analysis of Medieval Masonry Towers: A Comparative Study** Lauren Goyette, Branko Glišić	**Seismic performance of historical masonry structures reinforced with FRP exposed to Kahramanmaraş earthquakes (Mw 7.7 and 7.6) on February 6, 2023** Mehmet Selim Ökten, Burcu Balaban Ökten, Yaprak Arıcı Üstüner
	Field monitoring of masonry arch bridges using 2D and 3D DIC techniques Qili Fang, Stanyslav Grosman, Lorenzo Macorini, Bassam Izzuddin	**Seismic Vulnerability of Post-byzantine Domed Churches Belonging to Cultural Heritage** Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Iris Ganea-Christu, Adrian Ioniță		**The role of interventions on roofs in the seismic behavior of masonry churches: studies and observations** Maria Adelaide Parisi, Claudio Chesi, Gessica Sferrazza Papa
	Recent studies on the structural integrity and preservation of San Michele Bridge (1889, Italy) Rosalba Ferrari, Sergio Lorenzi, Emanuele Lizzori, Tommaso Pastore, Egidio Rizzi			**Retrofit of historic earthen constructions in Morocco using traditional materials: evaluation of impact of the Al Haouz earthquake** Alejandra Albuerne, Viviana Novelli, Fabio Freddi, Jacob Black, Sarah Esper, Zeyad Khalil, Giorgia Giardina, Roberto Gentile, Riccardo Vitale, Michael Whitworth, Asmaa Maaroufi, Hiba Shaimed
4:00pm - 4:30pm	Coffee-break			
4:30pm - 5:30pm	**CE-2: Vernacular constructions: history, inspection, analysis, conservation** **Climate-Driven Tectonics: Rural Wooden Architecture in Gilan and Shikoku** Seyed Alireza Seyedi, Amir Hossein Moghtadai, Asma Mehan	**C-3: Durability and sustainability** **LONG TERM ASSESSMENT OF THE IMPACT OF CHLORIDE AND SULPHATE INGRESS ON A MODERN HERITAGE BUILDING: A CASE STUDY OF AL MANHAL PALACE** Tayyaba Bibi, Hassan Dankar, Amel Chabbi, Yasmeen Al Rashdi	**E-1: Inspection methods, non-destructive techniques and laboratory testing** **Experimental investigation of masonry wall panels under combined settlement and tilting: setup and preliminary results** Eduarda Vila-Chã, Alberto Barontini, Sinan Acikgoz, Paulo B. Lourenço	**E-2: Numerical modelling & Structural analysis** **Parametric analysis of archaic steel columns** Donald Friedman **Exploring Structural Form: A Qualitative Computational Approach**

				JOSE MANOEL MORALES SANCHEZ
	The architecture forms and spatial configurations of traditional Hani Mushroom-shaped Houses in China Suyong Huang, Ziqi Yuan, Yuan Gao, Chenhao Zhou, Jianhe Wang, Meng Gong	Legal Risk Assessment of Re-using Building Materials and Elements in Historic Structures Ulrike Quapp, Jolanta Tamosaitiene, Klaus Holschemacher	Physical experiments on the fatigue behaviour of brick masonry arches Jingjing Xie, Stanyslav Grosman, Qili Fang, Lorenzo Macorini, Bassam A Izzuddin	The portals of the former ticket hall at Frankfurt on the Main main station. Examining two engineering masterpieces Cleo Reihl, Ludwig Wenzel, Matthias Jagfeld
	From Botanical Geometry to Squaring Techniques: Traditional Timber Structures Between the Montes de Toledo and the Tajo River in Spain Adelaida del Puerto García	Experimental study of cement mortar mixed with cork Irieix Costa Prieto, Toni Clarés Garcia, Carla Valencia Padín, Miquel Llorens Sulivera, Nathanaël Savalle	Wall size effect on the seismic response of unreinforced hollow clay brick masonry walls Ernesto Inzunza Araya, Savvas Saloustros, Katrin Beyer	Fatigue assessment of a historic railway bridge type with a detailed loading spectrum Camila Parodi-Figueroa, Dina D'Ayala, Wendel Sebastian
	Comparison of the results of the structural analysis of the St. Laurentius church in Kating, Germany taking into account the variation of the stiffness of the carpentry connections in the FEM model Elena Perria, Jessica Dias Pires, Mike Sieder	Woodcarving Decorations in Blue Orthodox Churches of the Podlaskie Voivodeship: Heritage Value and Restoration Context Katarzyna Woszczenko	Reinforcement and Grout Injection of the Altgeld Hall Bell Tower Gary D. Ogden, Donald W. Harvey, Matthew K. Ruth	
	E-4: Structural Health Monitoring	E-6: Other topics - engineering	SS-01: Sustainable repair, rehabilitation and retrofit of existing masonry structures: design, testing and analysis.	SS-16: Interventions on heritage structures: lessons learned from past earthquakes
	Performance of selected machine learning techniques in detecting wall defects on South African Heritage structures Kieran Juries, Patrick Bukenya, Pallav Kumar	Overview of Historic Masonry Building Performance during the February 6th, 2023 Kahramanmaras, Turkey Earthquake Doublet (Mw 7.8 and Mw 7.6) Sinem Guntepe, Oguz Koz, Oguz C. Celik	Seismic Retrofitting of Existing Masonry Buildings: How to Select the Optimal Solution Arash Rooshenas, Stefania Degli Abbati, Sergio Lagomarsino	Learning from Damaged Historic Constructions: Recent Earthquakes in Turkey Umut Almac, Emre Kishalı, Esra Balci, Nisa Semiz, Süheyla Koç, Erkan Kambek, Ahmet Türer
	Machine learning for detecting foundation settlements in historic masonry buildings using heterogeneous monitoring data Fernando Ávila, Enrique García-Macías, Nicola Cavalagli, Marco Breccolotti, Filippo Ubertini	Post-earthquake investigation of ancient monuments in Antakya (Antioch) Baran Bozyigit, Sinan Acikgoz, Duygu Ergenc, Irem Bozyigit, Heather Viles, Hatice Pamir	Development of design guidelines for innovative retrofit solutions applied to URM buildings Nicolò Damiani, Luca Albanesi, Carlo Filippo Manzini, Paolo Morandi	Assessment of the effectiveness of interventions based on the seismic performance of the structure after their application Androniki Miltiadou-Fezans, Elisabeth Vintzileou, Efi Delinikola
	STRAIN-BASED DAMAGE IDENTIFICATION IN MASONRY WALLS	Local Architecture of Harran with its Conical Domed Houses and February 6, 2023	Finite Element Modeling Of Heritage Unreinforced Masonry Walls Retrofitted Using 3D-	

	USING ARCHETYPAL SIMULATIONS AND DEEP LEARNING Alina Elena Eva, Andrea Meoni, Valentina Giglioni, Ilaria Venanzi, Filippo Ubertini	**Kahramanmaras Earthquake** Fatma Sebnem Kuloglu Yuksel	**Printed Steel Reinforcement** Andreas Georgiou, Nicolas Hadjipantelis, Ioannis Ioannou, Odysseas Kontovourkis, Marios Mavros	**Impact of the 2020 Beirut Blast and 2023 Syria Earthquake on the Local Built Heritage: Damage Analysis, Lesson Learned, and Seismic Upgrading** Michel CHALHOUB, Felipe PIRES
	Structural monitoring and analysis of heritage monument in Angkor Thom using NARX neural network Shunsuke Yamada, Mithuharu Fukuda, Yoshinori Iwasaki	**Domed Churches in Wallachia. Architectural Styles, Specific Damages and Post-Earthquake Interventions** Gabriel Dănilă, Horia Radu Moldovan, Vlad Petrescu, Adrian Ioniță, Iris Ganea-Christu	**Assessing the influence of inclined base hinge on the seismic response of masonry walls: the case study of the San Giuseppe dei Minimi's oratory** Linda Giresini, Omar AlShawa, Domenico Liberatore, Luigi Sorrentino	

POSTERS: Monday - Thursday, 15-16/Sept/2025

POSTERS

Numerical Modeling of an Innovative Cemented Bahareque Wall: Calibration and Sensitivity Analysis

Juan Molina-Cedeño, Natividad Garcia-Troncoso, Hilda Zambrano-Montalvan, Miguel Vergara-Pin, Ken Tello-Ayala, Diego Sosa, Christian Michael Gómez Soto, Raúl Fernando Baquero Campaña

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Experimental evaluation of seismic performance of ce-mented bahareque walls for sustainable social housing

Hilda Zambrano-Montalvan, Natividad Garcia-Troncoso, Juan Molina-Cedeño, Miguel Vergara-Pin, Ken Tello-Ayala, Diego Sosa, Christian Michael Gómez Soto, Raúl Fernando Baquero Campaña

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Design and construction of the monumental dome using novel interlocking stone masonry

KARAN BHAIYASAHEB MALI, RAM BABU PRASAD, SONALI UPADHYAYA, VAIBHAV SINGHAL