

HERACLES

WINTER SCHOOL 2019

Monitoring Technologies for Enhancing Environmental and Structural Resilience of Architectural Heritage

18-19 March, 2019 – Perugia (Italy)



PROGRAMME

Monday, March 18th - Monitoring and diagnostic technologies for preventive conservation of architectural heritage Location: Aula Magna

14h00 – Opening session by F. Ubertini and A.L. Materazzi

14h10 – G. Padeletti (CNR-ISMN) – *“HERitage Resilience Against CLimate Events on Site-HERACLES Project: Mission and Vision”*

14h40 – M. Costantini (e-Geos) – *“Satellite radar interferometry: introduction and application to building structural assessment”*

15h00 – G. Milani (Politecnico di Milano) – *“Fast seismic vulnerability evaluation of towers and churches by means of an adaptive NURBS linear kinematic FE limit analysis”*

15h30 – F. Clementi (Università Politecnica delle Marche) – *“The Non-Smooth Contact Dynamics method for the analysis of masonry structures”*

16h00 – A. Formisano (Università di Napoli “Federico II”) – *“Seismic vulnerability of masonry building aggregates and risk analysis of historical centres”*

16h30 – *Coffee break*

16h50 – F. Ubertini (Università di Perugia) – *“HERACLES SHM and structural diagnostic activities in Gubbio”*

17h10 – I. Venanzi (Università di Perugia) – *“Seismic damage localization in historic structures through online FEM calibration”*

17h30 – E. García-Macías (Università di Perugia) – *“Seismic interferometry for SHM of historic structures”*

17h50 – F. Cluni, V. Gusella, G. Vinti (Università di Perugia) – *“Thermographic analysis of plastered masonry walls”*

Tuesday, March 19th - Environmental monitoring and diagnosis for enhancing cultural heritage resilience to climate change Location: Aula Magna

09h00 – Welcome by F. Cotana and A.L. Pisello

09h10 – M. Folegani (Sistema) – *“Climate change and extreme weather conditions analysis in HERACLES sites”*

09h30 – N. Cavalagli (Università di Perugia) – *“Hierarchical environmental risk mapping of material degradation in historic buildings”*

09h50 – G. Padeletti (CNR-ISMN) – *“From the study of the past new solutions for the future”*

10h10 – P. Pouli (Forth, Greece) – *“Monitoring and Mapping of Deterioration Products on Cultural Heritage Monuments Using portable Imaging and Laser Spectroscopy instrumentation” (Recorded video presentation)*

10h30 – Federica Rosso (Sapienza Università di Roma) – *“Smart and traditional materials for enhancing CH resilience to climate change”*

10h50 – *Coffee break*

11h10 – I. Catapano, G. Ludeno (CNR-IREA) – *“Ground Penetrating Radar: a tool for non invasive surveys of infrastructures and historical assets”*

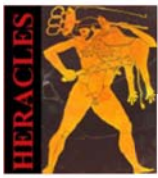
11h30 – I. Pigliautile (Università di Perugia) – *“Wearable environmental monitoring: a new experimental prototype exploited within HERACLES project”*

11h50 – A.L. Pisello (Università di Perugia) – *“Microclimate change in cultural heritage: the effect on outdoor comfort, heritage conservation and energy demand”*

12h10 – J. Moßgraber (Fraunhofer IOSB) – *“From Sensor to Decision - ICT tools to support the management of Cultural Heritage”*

12h30 – C. Balocco (Università di Firenze) – *“Microclimatic and biological monitoring as integrated approach for conservation of Cultural Heritage. A case study at the the Palatina Library in Parma”*

12h50 – *Closing session*



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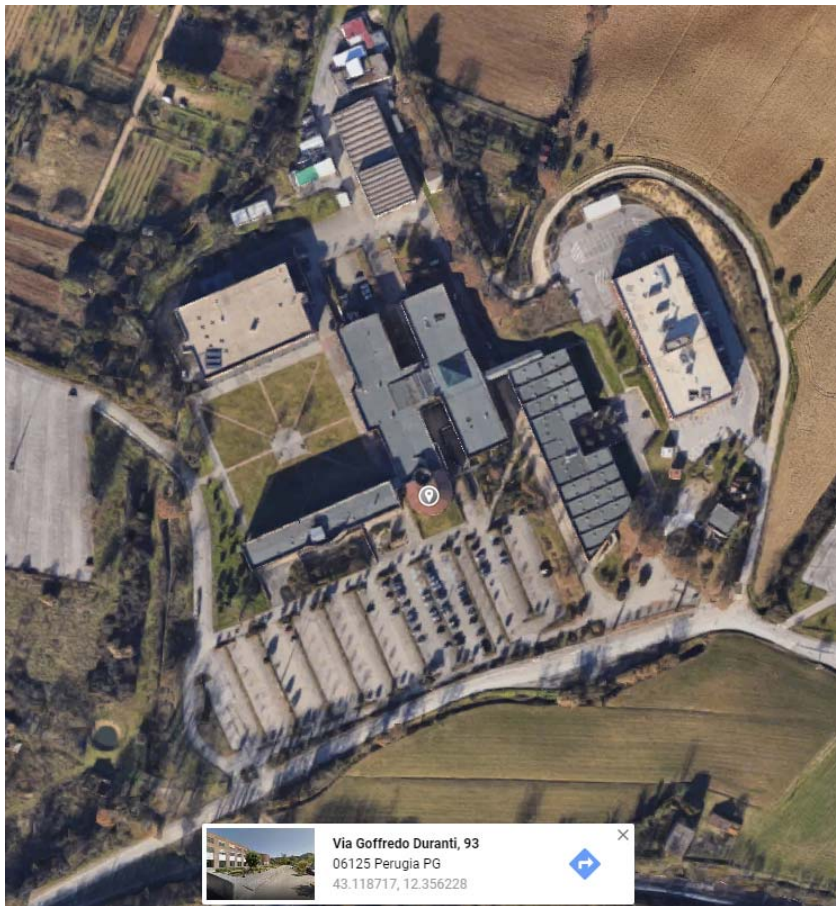
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DIPARTIMENTO DI INGEGNERIA
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DIPARTIMENTO DI ECCELLENZA



Location: Aula Magna of the Engineering Campus, University of Perugia



Address:

Engineering Campus, University of Perugia
Via G. Duranti, 93 - 06125 Perugia
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Organizing Committee

Filippo Ubertini (Chair, day 1) - Anna Laura Pisello (Chair, day 2)
N. Cavalagli, I. Pigliatile – nicola.cavalagli@unipg.it (Contact for registration)