

DOCTORAL PROGRAM IN CIVIL AND ENVIRONMENTAL ENGINEERING

Final Year Meeting 7th CEEPhD DAY

Location Campus of Engineering, University of Perugia

Latitude: 43.118177 Longitude: 12.357942

(Teams platform for international members of the Faculty

Board)

Timetable October 28th 2025 - 9:20 a.m. (CET)

Schedule

9:20-9:35 Welcome address

First Year Presentations (XL Cycle)

Each PhD student has 15 minutes for the presentation and 5 minutes for Q&A

9:35-10:55 <u>Session 1.A.1 – Aula Magna</u>

9:35-10:55 <u>Session 1.B.1 – Auletta</u>

9:35-10:55 <u>Session 1.C.1 – DICA meeting room</u>

Second Year Presentations (XXXIX Cycle)

Each PhD student has 20 minutes for the presentation and 5 minutes for Q&A

11:10-13:15 <u>Session 2.A.1 – Aula Magna</u>

11:10-13:15 <u>Session 2.B.1 – Auletta</u>

11:10-13:15 <u>Session 2.C.1 – DICA meeting room</u> 14:30-16:10 <u>Session 2.C.2 – DICA meeting room</u> CLICK ON A SESSION
TITLE TO ACCESS THE
VIRTUAL ROOM!

Third year presentations (XXXVIII Cycle)

Each PhD student has 30 minutes for the presentation and 10 minutes for Q&A

14:30-16:30 <u>Session 3.A.1 – Aula Magna</u>

14:30-16:30 <u>Session 3.B.1 – Auletta</u>

16:40-18:00 <u>Session 3.A.2 – Aula Magna</u>

16:40-18:00 <u>Session 3.B.2 – Auletta</u>

18:00-19:00 International Faculty Board meeting



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Morning parallel sessions

	AULA MAGNA	AULETTA	DICA MEETING ROOM
9:20		WELCOME ADDRESS	
	SESSION 1.A.1	SESSION 1.B.1	SESSION 1.C.1
9:35	Chairs: F Cluni and C Capponi	Chairs: L Torre and D Salciarini	Chairs: <i>M Filippucci and B Terenzi</i>
9:35	Francesca Gagliardi	Aparna Sudarsana Babu	Matteo Lanfaloni
	High-Frequency Monitoring and Transient Analysis for the Diagnosis of Water Distribution Networks	Lignin-Derived Bio-adsorbents for Effective Removal of Methylene Blue from Water	Models of Active Soil Defence for Local Authorities
9:55	Alina Elena Eva	Giulia Capati	Giovanna Binetti
	AI-Enhanced Seismic Monitoring Strategies for Masonry Structures with Smart Material Integration	Advancing Energy Geostructures for Subsurface Urban Heat Islands Mitigation	Ecodesign and Circular Economy Processes and Methods. Potentialities and criticalities of new EU regulations on circular economy, greenwashing and ecodesign highlighted through the analysis of a case study in Umbria.
10:15	Virginia Silvestri	Michele Buconi	Livia Bonciarelli
	Between memory and design: contemporary paradigms for a sustainable architectural restoration	Development and characterization of novel Carbon/Phenolic Composites (CPCs) and Carbon/Carbon Composites (CCCs) for harsh environments	Sustainability of green infrastructures for climate change resilient cities: the case of urban drainage systems
10:35	Luca Costa	Manuel Mancuso	Laura Suvieri
	Optimization of energy and operational performance of urban–rural water distribution systems	Artificial Intelligence Systems Supporting the Evaluation, Supervision, and Diagnostics in the Design of Provisional and Definitive Safety Interventions for Existing Tunnels	Representation and modeling tools for the adaptive reuse of dismissed and vacant buildings towards sustainable suburbs (National PhD program on "Defence from natural risks
			and ecological transition of buildings")
10:55	CECCION O A 4	COFFEE BREAK	CECCION O O 4
11:10	SESSION 2.A.1 Chairs: S Meniconi and V Menchetelli	SESSION 2.B.1 Chairs: <i>M Gioffrè and N Cavalagli</i>	SESSION 2.C.1 Chairs: M Breccolotti and A D'Alessanndro
11:10	Debora Falocci	Mehran Shahpari	Arash Rahimi
11.10	Modeling Transients Response in Complex Pressurized Networks	Green Composite Materials for Structural Strengthening (REPAIRS)	Structural Health Monitoring and intelligent damage diagnosis of railway bridges using machine learning approaches
11:35	Eleonora Dottorini	Michele Mattiacci	Israel Sousa
	The Monumental Cemetery of Perugia: study on the integrated digital methodologies and technologies for the knowledge and the communication of cultural heritage.	Advanced strategies for strain-based health monitoring of masonry structures	3D_IMPULSE-3D innovative materials for printed multifunctional sustainable engineering structures (National PhD program on "Defence from natural risks and ecological transition of buildings")
12:00	Gregorio Gazzetta	Francesco Mariani	Eugenio Moreira
	Water availability evaluation by reanalysis and ground measurements.	Handling uncertainties in Safety Assessment of Existing Bridges - SAFER	Use of digital twins for predictive maintenance and detection of anomalies in existing and monumental buildings
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12:25	Claudia Cerbai	Waqas Qayyum	Pasquale Guarino
12:25	Claudia Cerbai Study for the definition of an Information System with BIM procedures for Real Estate and OO.PP.	Waqas Qayyum Dynamic analysis of complex historic constructions and definition of effective strategies for their structural monitoring – (DESMOS)	Pasquale Guarino AMUSED - Advanced Methods for aUtomated Survey and gEneration of Digital twins of civil engineering structures
12:25 12:50	Study for the definition of an Information System with BIM procedures for Real Estate and OO.PP. Sara Prapotnich	Dynamic analysis of complex historic constructions and definition of effective strategies for their structural monitoring – (DESMOS) Asad Ullah	AMUSED - Advanced Methods for aUtomated Survey and gEneration of Digital twins of civil engineering structures Livia Fabbretti
	Study for the definition of an Information System with BIM procedures for Real Estate and OO.PP. Sara Prapotnich Digital twin and artificial intelligence for the management of a District Metered Area of Padua water distribution	Dynamic analysis of complex historic constructions and definition of effective strategies for their structural monitoring – (DESMOS) Asad Ullah Advanced analysis methods for Arch Gravity Dams (AGD) subjected to coupled seismic, hydraulic, static	AMUSED - Advanced Methods for aUtomated Survey and gEneration of Digital twins of civil engineering structures
	Study for the definition of an Information System with BIM procedures for Real Estate and OO.PP. Sara Prapotnich Digital twin and artificial intelligence for the management of a District Metered	Dynamic analysis of complex historic constructions and definition of effective strategies for their structural monitoring – (DESMOS) Asad Ullah Advanced analysis methods for Arch Gravity Dams (AGD) subjected to	AMUSED - Advanced Methods for aUtomated Survey and gEneration of Digital twins of civil engineering structures Livia Fabbretti Study and implementation of innovative methods for seismic monitoring and



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Afternoon parallel sessions

	AULA MAGNA	AULETTA	DICA MEETING ROOM
14:30	SESSION 3.A.1 Chairs: <i>F Ubertini and I Venanzi</i>	SESSION 3.B.1 Chairs: <i>F Bianconi and M Filippucci</i>	SESSION 2.C.2 Chairs: <i>J Dari and A Gambelli</i>
14:30	Matteo Castellani	Simona Ceccaroni	Martina Natali
	Artificial Intelligence methods for Drone inspections and structural health monitoring of bridges – AIDBridge	The representation of territorial data for urban and landscape regeneration.	Integrated use of radar backscatter observations, machine learning and land surface modelling to improve soil and vegetation dynamics in Mediterranean agroforestry systems
14:55			Jessica Di Mario
15:10	Elisa Tomassini Physics-enhanced machine learning methods for Structural Health Monitoring of bridge networks	Chiara Mommi Visions of the Landscape: AI as a tool for Reading, Understanding, and Interpretation	Utilization of by-products from agri-food chains for the production of bioactive molecules, biomaterials, and biofertilizers in a third-generation biorefinery
15:20			Francesco Leopardi Hydrological modelling and trend analysis of river discharge and runoff through the use of satellite products.
15:45			Yariv Portnoy
15:50	Pooria Mesbahi Probabilistic methods for Structural Health Monitoring of Bridge Networks	Andrea Migliosi The Chiascio dam and its reservoir: analysis, models and scenarios for the development of internal areas	Advanced manufacturing of extreme- temperature resisting materials
16:30		COFFEE BREAK	
10.40	SESSION 3.A.2	SESSION 3.B.2	
16:40	Chairs: F Ubertini and D Salciarini	Chairs: I Venanzi and N Cavalagli	
16:40	Erica Cernuto	Roberta Scungio	
	Landslide interacting with viaducts: a combined approach based on InSAR data and geomechanics models.	Strengthening of masonry arches and vaults using natural composite materials based on hemp ropes and nets (National PhD program on "Defence from natural risks and ecological transition of buildings")	
17:20	Sara Galeazzi	Prajwal Giri	
	Understanding the role of vegetation in slope stability through hydrological and mechanical processes.	New IoT (Internet of Things) Technologies and data fusion for the Structural Health Monitoring of Reinforced Concrete Precast Structures	
18:00	International Faculty Board Meeting		
19:00		Closure	