

DOCTORAL PROGRAM N CIVIL AND ENVIRONMENTAL ENGINEERING

4th Final Year Meeting

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 26th 2023 – 9:30 a.m. (CET)

Program

9:30 Welcome address

SESSION 1.A.1 - Auletta

09:30 First Year Presentations (XXXVIIICycle, 15 min + 5 min questions) – Chair Diana Salciarini

09:30 - 09:50 Simona Ceccaroni

The representation of territorial data for urban and landscape regeneration.

9:50-10:10 Andrea Migliosi

The Chiascio dam and its reservoir: analysis, models and scenarios for the development of internal areas

10:10-10:30 Chiara Mommi

Artificial Intelligence in Architectural Representation

10:30-10:50 Sara Galeazzi

Influence of land use and agriculture practices on hillslope instability

10:50-11:10 Erica Cernuto

Landslide interacting with viaducts: a combined approach based on InSAR data and geomechanics models.

11:10-11:30 Break



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SESSION 1.A.2 - Aula Magna

9:30 First Year Presentations (XXXVIIICycle, 15 min + 5 min questions) – Chair Ilaria Venanzi

09:30 - 09:50 Matteo Castellani

Artificial Intelligence methods for Drone inspections and structural health monitoring of bridges – AIDBridge

9:50-10:10 Pooria Mesbahi

Probabilistic methods for Structural Health Monitoring of Bridge Networks

10:10-10:30 Prajwal Giri

New IoT (Internet of Things) Technologies and data fusion for the Structural Health Monitoring of Reinforced Concrete Precast Structures

10:30-10:50 Elisa Tomassini

Physics-enhanced machine learning methods for Structural Health Monitoring of bridge networks

10:50-11:10 Roberta Scungio (Online from Portugal)

Strengthening of masonry arches and vaults using natural composite materials based on hemp ropes and nets (National PhD Program on Risks)

SESSION 1.B.1 - Auletta

11:30 Second Year Presentations (XXXVIICycle, 20 min + 5 min questions) – Chair Alessia Flammini

11:30-11.55 Costanza Borghesi

Tailoring High-Entropy Oxides (HEOs) as Emerging Radiative Materials for Green and Energy Saving Buildings.

11.55-12:20 Marco Parriani (online from Göteborg)

Characterization and reactivity of ionic and excited species with atoms, molecules and radicals of environmental interest

12:20-12:45 Arash Rahi (online from Germany)

Effects of Land Use and Land Cover (LULC) changes on runoff generation in a climate warming scenario

12:45-13:10 Francesco Cotana

Giuseppe Poggi international architect. Historiographical investigation, representation and graphic analysis of the designer's work with regard to 19th century Anglo-American architecture.

SESSION 1.B.2 - Aula Magna

11:30 Second Year Presentations (XXXVIICycle, 20 min + 5 min questions) – Chair Nicola Cavalagli

11:30-11.55 Filippo Cornacchini

Digital ecosystems for public works and representative experiments in virtual environments

11.55-12:20 Maria Eleonora Pipistrelli

Probabilistic modeling and simulation of random materials

12:20-12:45 Mouadh Rafai (online from TUDelft)

Energy geostructures for green buildings

12:45-13:10 Francesco Casinini

Development of innovative data acquisition and transmission systems for diagnosis and control of water networks



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SESSIONE 1.B.3 – Department meeting room (basement / online)

11:30 Second Year Presentations (XXXVIICycle, 20 min + 5 min questions) – Chair Silvia Meniconi

11:30-11.55 *Desiree Muscas*

Integrating urban green's ecosystem services data into sustainable and resilient city planning with an urban metabolism approach

11.55-12:20 Da Conceicao Martins Nuno Miguel

CFD approach to fault detection in pressurized pipe systems by means of the transient state

12:20-12:45 Alberto Doro (online from AcegasApsAmga)

Evaluation of transient behavior in the water distribution network in the city of Padova: the impact of the city center's district hospital

12:45- 13:10 Luciano Veritti (online from AcegasApsAmga)

Dynamic behaviour of control valves in water supply systems

SESSION 2 - Aula Magna

14:00 Third year presentations (XXXVI Cycle, 30 min+10 min questions) - Chairs Filippo Ubertini and Massimiliano Gioffrè

14:00-14.40 Barili Sofia

Bioplastics effects on soil quality: a research on the interactions between the polymers degradation and the physical, chemical and biological properties of soil

14:40-15:20 Pauselli Davide

Soil Structural Interaction in Bridges

15:20-16:00 Farneti Elisabetta

A new approach for structural assessment based on computational collapse analysis and satellite remote sensing monitoring

16:00 - 16:40 Giglioni Valentina

Transfer Learning approaches for structural health monitoring of roadway bridges

16:40- 17.00 Lupattelli Arianna

Thermo-Hydro-Mechanical behavior of Energy Piles and Micropiles

17:00-17:40 Battistoni Monica

Resilient Communities. Exaptation concept applied to climate changes as a regenerative process of post-industrial cities. Case study: Perugia

18:00 International Faculty Board Meeting

19:00 Closure