

# R&I TOWARDS NEXT CHALLENGES

Research and Innovation as a driver towards a green, climate neutral and digital world

8<sup>th</sup> Ferrara International PhD Workshop 2022\*

BLENDDED WORKSHOP Through GoToMeeting web-hosted service

IDAUP - International Doctorate in Architecture and Urban Planning

ROBERTO DI GIULIO, IDAUP Programme Coordinator  
THEO ZAFFAGNINI, DA PhD Programme Supervisor, DA Deputy Vice-coordinator

\*SCIENTIFIC INTERNATIONAL WS COORDINATOR: THEO ZAFFAGNINI  
ORGANIZATION: M. BISI, E. BOLDRIN, L. MORGANTI, O. PALMINI, I. RUZZIER, L. SACCHETTI, I. SPASARI, A. VOLTA, T. ZAFFAGNINI

**04/07 - MONDAY** DA, Sala del Consiglio

9:00 1<sup>ST</sup> WEEK REGISTRATION

9:30 8<sup>TH</sup> INTERNATIONAL DA PHD WORKSHOP 2022 OPENING

ROBERTO DI GIULIO PhD, Full Professor, DA IDAUP Program coordinator, University of Ferrara

THEO ZAFFAGNINI PhD, Associate Professor, DA Deputy Vice-coordinator IDAUP, University of Ferrara

10:00 PRESENTATION AND AIMS OF THE WS SEMINARS BY SCIENTIFIC SEMINARS COORDINATORS

10:30 MEETING BETWEEN POLIS PHD CANDIDATES AND DA CO-SUPERVISORS

**THE SCIENTIFIC RESEARCH IN THE FIELD OF ARCHITECTURAL TECHNOLOGY**

Examples of basic research, experimentation and laboratories aimed to enhance energy efficiency and environmental

14:00 INNOVATIVE AND ENERGY SELF-SUFFICIENT BUILDINGS IN THE DUBAI DESERT. TEACHING, RESEARCH, PROTOTYPING, CONSTRUCTION AND COMPETITION FOR THE WORLD CONTEST SOLAR DECATHLON MIDDLE EAST 2018 AND 2020(21)

VITTORINO BELPOLITI MSc, PhD, Assistant Professor | Department of Architectural Engineering, University of Sharjah

MARTA CALZOLARI MSc, PhD, Assistant Professor | DA, University of Ferrara

PIETROMARIA DAVOLI MSc, PhD, Full Professor | DA, University of Ferrara

16:00 THE LIFE "HEROTILE" PROJECT, NEW PRODUCTS FOR VENTED ROOFS AND FOR PASSIVE CLIMATIZATION

GIOVANNI ZANNONI MSc, PhD, Full Professor, DA, University of Ferrara

17:00 PASSIVE COOLING OF BUILDINGS USING PHASE CHANGE MATERIALS IN ENVELOPE (PCMS)

ELEONORA BACCEGA MSc, IDAUP PhD candidate, DA, University of Ferrara

**05/07 - TUESDAY** FOCCHI S.p.A. Headquarters, Poggio Torriana (RN)

**GUIDED TOUR OF FOCCHI SPA INDUSTRY**

Design, manufacture and installation of curtain walling with high technological and service content. Engineering for external cladding of complex structures

9:50 INTRODUCTION

THEO ZAFFAGNINI PhD, Associate Professor, DA Deputy Vice-coordinator IDAUP, University of Ferrara

10:00 PREFABRICATED TECHNOLOGICAL SOLUTIONS FOR BESPOKE ARCHITECTURAL BUILDING ENVELOPE

ALESSANDRO PRACUCCI MSc, PhD, Innovation Manager, Focchi S.p.A.

ALICE PIERLEONI MSc, System Designer, Focchi S.p.A.

13:00 VISIT TO FACTORY PRODUCTION FACILITIES AND VISUAL MOCK-UPS EXPOSITION

TOMAS MAESTRI MSc, Production Engineer, Focchi S.p.A.

**06/07 - WEDNESDAY** DA, Room B5

**DIGITAL LANDSCAPE**

Tools and Strategies to address and design integrated landscape transformations

9:00 INTRODUCTION

GIANNI LOBOSCO MSc, PhD, Adjunct Professor, Sealine Research Centre, DA, University of Ferrara

9:30 LANDSCAPES AS INFRASTRUCTURES

LORENZO TINTI MSc, PhD candidate, Sealine Research Centre, DA, University of Ferrara

10:30 REPRESENTATION AND ANALYSIS OF EVOLVING LANDSCAPES

GIANNI LOBOSCO MSc, PhD, Adjunct Professor, Sealine Research Centre, DA, University of Ferrara

11:30 COMPUTATION AND BIM IN LANDSCAPE ARCHITECTURE

IORELLA SCHIAVO MSc, PhD, Co-Founder BIM Creatives, Landscape architect & BIM Manager LAND Italia s.r.l.

BEATRICE MAGAGNOLI MSc, Landscape architect & BIM Manager LAND Italia s.r.l.

**URBAN IDENTITY: RESEARCH AND INNOVATION**

Applied research outcomes for innovative urban design

14:00 INTRODUCTION

GABRIELE LELLI MSc, Associate Professor, Scientific Coordinator Next City Lab, DA, University of Ferrara

14:10 ARTIFICIAL INTELLIGENCE AND URBANISM: AN INTRODUCTION

OTELLO PALMINI MSc, IDAUP PhD candidate, DA, University of Ferrara

14:40 AI URBANISM: TOWARD THE END OF THE CITY?

FEDERICO CUGURULLO MSc, PhD, Assistant Professor, Dublin Trinity College

15:40 ROUND TABLE AND DISCUSSION

16:00 URBAN IDENTITY AND DIGITAL REVOLUTION. KEY CONCEPTS AND URBAN DESIGN TOOLS

MARCO NEGRI MSc, IDAUP PhD candidate, Next City Lab, DA, University of Ferrara

16:30 INCLUSIVE DEVELOPMENT OF A SMART CITY IN THE AGE OF GREEN AND DIGITAL TRANSITION. NICE VILLE INTELLIGENTE

THEO ZAFFAGNINI PhD, Associate Professor, DA Deputy Vice-coordinator IDAUP, University of Ferrara

17:30 ROUND TABLE AND DISCUSSION

**07/07 - THURSDAY** DA, Room B5

**SCENARIO PLANNING**

Uncertainty as a driver for research

9:00 INTRODUCTION

LORENZO TINTI MSc, PhD candidate, Sealine Research Centre, DA, University of Ferrara

9:30 SCENARIO EVALUATION BY DESIGN

GIANNI LOBOSCO MSc, PhD, Adjunct Professor, Sealine Research Centre, DA, University of Ferrara

11:00 WORKSHOP // SCENARIO PLANNING APPLICATION

16:00 RESULT DISCUSSION

**08/07 - FRIDAY** DA, Room B5

**XXXIV cycle DOCTORATE FINAL DISSERTATION**

9:00 START OF THE FINAL EXAMS

13:00 EXPECTED CONCLUSION OF THE FINAL DISSERTATIONS

16:00 PROCLAMATIONS

16:30 ROUND TABLE AND DISCUSSION WITH THE PHD CANDIDATES: "HOW TO DEAL WITH THE FINAL DISSERTATION"

THEO ZAFFAGNINI PhD, Associate Professor, DA Deputy Vice-coordinator IDAUP, University of Ferrara

**11/07 - MONDAY** DA, Sala del Consiglio

10:00 2<sup>ND</sup> WEEK REGISTRATION

**DIGITIZING AND GREENING THE BUILT ENVIRONMENT**

10:30 INTRODUCTION

ROBERTO DI GIULIO PhD, Full Professor, DA IDAUP Program coordinator, University of Ferrara

11:00 TOWARDS RESILIENT, PEOPLE CENTRIC AND CLIMATE-NEUTRAL CITIES THROUGH DIGITAL TRANSMISSION

RIZAL SEBASTIAN MSc, PhD, Professor, Faculty of Technology, Innovation & Society, the Hague University of Applied Science

12:00 CONCLUSIONS

ROBERTO DI GIULIO PhD, Full Professor, DA IDAUP Program coordinator, University of Ferrara

RIZAL SEBASTIAN MSc, PhD, Professor, Faculty of Technology, Innovation & Society, the Hague University of Applied Science

14:00 KNOWLEDGE ASSESSMENT

**12/07 - TUESDAY** DA, Sala del Consiglio

**DIGITAL SURVEY AND DOCUMENTATION**

Research approaches for Knowledge, management and conservation of the built heritage

9:15 INTRODUCTION

FEDERICA MAIETTI MSc, PhD, Associate Professor, DA, University of Ferrara

9:30 DIGITAL DOCUMENTATION AND HERITAGE AT RISK. INSIGHTS WITHIN THE HORIZON EUROPE FRAMEWORK

FEDERICA MAIETTI MSc, PhD, Associate Professor, DA, University of Ferrara

10:15 BIM-BASED AND SEMANTIC TECHNOLOGIES TOWARDS ENHANCED DIGITAL DOCUMENTATION OF ARCHITECTURE AND ARCHAEOLOGY: DATA INTEGRATION AND ENRICHMENT FROM THE NEW ITALIAN CATALOGUE OF CULTURAL HERITAGE

MARCO MEDICI MSc, PhD, Researcher, DA, University of Ferrara

11:20 SCAN TO BIM PROTOCOL FOR CULTURAL HERITAGE DIGITAL DOCUMENTATION AND MAINTENANCE

FABIANA RACO MSc, PhD, Researcher, DA, University of Ferrara

12:00 DIGITAL DOCUMENTATION OF THE IPIRANGA AREA IN SAN PAOLO, BRAZIL

LUCA ROSSATO MSc, PhD, Researcher, DA, University of Ferrara

12:40 CONCLUSIONS AND EXPLANATION OF LEARNING ASSESSMENT

FEDERICA MAIETTI MSc, PhD, Associate Professor, DA, University of Ferrara

14:00 THE DIGITAL CULTURAL HERITAGE FOR THE ADAPTIVE REGENERATION OF HISTORIC CITIES

PAOLA PUMA MSc, PhD, Associate Professor, DIDA, University of Firenze

16:00 KNOWLEDGE ASSESSMENT

**13/07 - WEDNESDAY** DA, Sala del Consiglio

**TERRITORIAL PLANNING BETWEEN COHESION AND SUSTAINABILITY**

9:00 PLANNING POST-EARTHQUAKE URBAN REGENERATION: THE CASES OF PERUGIA MONTELUCE HOSPITAL AND MASS-TRANSIT SYSTEM MINIMETRÒ

GASTONE AVE MCRP, Full Professor of City and Regional Planning, DA, University of Ferrara

FRANCESCO ALBERTI MSc, PhD, Researcher, Adjunct Professor of City and Regional Planning, DA, University of Ferrara

LUCA FONDACCI MSc, PhD, Research Grant Recipient, Interuniversity Research Center on Pollution and Environmental "Mauro Felli", CIRIAF, University of Perugia

11:00 POST-EARTHQUAKE RECONSTRUCTION PLANS AND EXPERIENCES IN CENTRAL ITALY

MASSIMO SARGOLINI MSc, PhD, Full Professor of City and Regional Planning and Director of the Department of Architecture, University of Camerino

14:00 POST-EARTHQUAKE RECONSTRUCTION IN THE MARCHE-CENTRAL ITALY REGION AND THE CHALLENGE OF THE ITALIAN RECOVERY AND RESILIENCE PROGRAM-PNRR, 2021-2026

GIANLUCA LOFFREDO MSc, PhD, Extraordinary Sub Commissioner of Marche Region, Extraordinary Commissioner 2016 Earthquake Reconstruction, Presidency of the Council Minister

16:00 KNOWLEDGE ASSESSMENT

**14/07 - THURSDAY** DA, Sala del Consiglio

**URBAN PLANNING BETWEEN RISKS AND INNOVATIONS**

9:00 THE POST-EARTHQUAKE RECONSTRUCTION IN EMILIA-ROMAGNA, THE HOLISTIC PROJECT FOR THE CITY OF FERRARA

FRANCESCO ALBERTI MSc, PhD, Researcher, Adjunct Professor of City and Regional Planning, DA, University of Ferrara

11:00 THE PRODUCTIVE MANAGEMENT OF THE AGRICULTURAL TERRITORY IN EMILIA-ROMAGNA: THE CASE OF THE CUM IN THE CONTEXT OF THE PROTECTION OF THE PO DELTA

CARLO RAGAZZI Degree in Political Science, President of Consortium of Men of Massenzatica, CUM Ferrara

14:00 KNOWLEDGE ASSESSMENT

16:00 CONCLUSION OF THE 8TH FERRARA INTERNATIONAL PHD WORKSHOP IDAUP 2022 AND ATTENDANCE CERTIFICATES DELIVERY

ROBERTO DI GIULIO PhD, Full Professor, DA IDAUP Program coordinator, University of Ferrara

THEO ZAFFAGNINI PhD, Associate Professor, DA Deputy Vice-coordinator IDAUP, University of Ferrara

*NOTE ON THE ONLINE EVENTS*

IN ORDER TO BE REGISTERED TO THE 8<sup>TH</sup> FIW OR TO A DAILY SEMINAR, PLEASE WRITE ONE DAY BEFORE THE EVENT TO THEO.ZAFFAGNINI@UNIFE.IT AND TO ILARIA.SPASARI@UNIFE.IT TO OBTAIN THE GoToMEETING PLATFORM SESSION ID.

Promoted by



July 4th-14th 2022

Dipartimento di Architettura  
Via della Ghiara, 36 | Ferrara