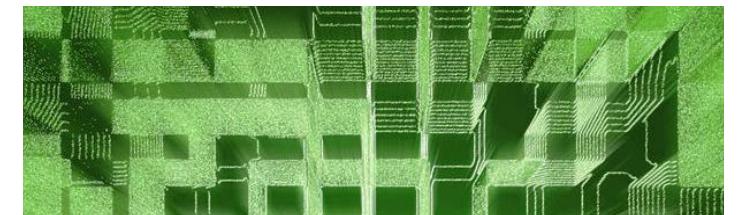


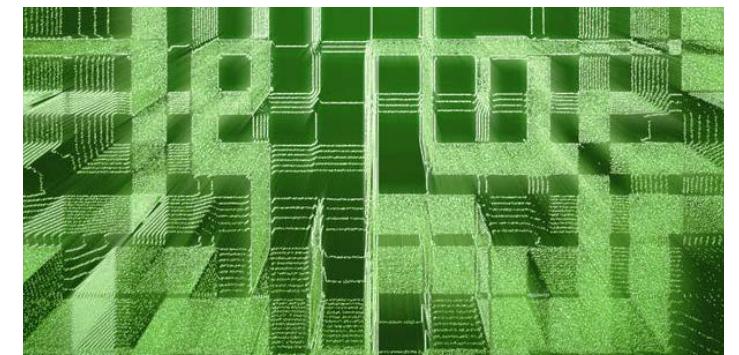


6th
**Architecture & Environment
International Symposium**

ROME 9/10 APRIL 2021



CITIES, GREEN SYSTEMS, HUMAN HEALTH AND WELLBEING



SAPIENZA
UNIVERSITÀ DI ROMA
DIPARTIMENTO DI PIANIFICAZIONE DESIGN
TECNOLOGIA DELL'ARCHITETTURA



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BRIEF

The 6th Architecture & Environment International Symposium explores the relation between cities, green systems and human health and well-being from different perspectives. The symposium brings together many points of view at various levels on questions of urban nature and green systems, as well as urban farming to improve the urban environment, human health, well-being and quality of life, as well as biodiversity and urban ecosystems that play an essential role in supporting human health and well-being.

This is based on the recognition of the fundamental shift in the understanding of health from a static state of complete physical, mental and social well-being to the affirmation that health is a dynamic and continuous process that requires focus on the dynamic relationship between the individual and the environment that needs to be addressed in an adaptive way. The event promotes a new approach that seeks to correlate the need to build and to densify cities with the need for green systems and infrastructure, as well as an alliance between green systems, farming, health and urban regeneration, in which urban nature and green systems, as well as urban agriculture provide ecosystem services, food, employment, means of recycling waste, climate resilience, and a sense of identity.

The Symposium is a collaboration between Sapienza University of Rome and Vienna University of Technology. Due to COVID restrictions the symposium will take place online. In case restrictions are eased at the time the symposium will take place as a hybrid event (in person & online).

The AE symposia series has led to the book series by Springer Nature entitled Designing Environments (<https://www.springer.com/series/16632>). The 2019 AE3 symposium entitled Envelope Ecologies led to a successful H2020 FET Open grant application for a research project entitled Ecolopes.ECOlogical building enveLOPES (www.ecolopes.eu).

1ST DAY

link zoom

On Friday 9th April, presentations focus on questions and approaches concerning rural urban metabolism and food dynamics in Alpine urban ecosystems; on introducing the "One Health" Living_Lab in Trentino and on addressing the role of deploying scientific results into operational activities of various stakeholders; on the impact of different vegetation types on microclimate in the city with focus on the example of Rome; on the impact and challenges of gardening as key element of cultivating cities; and on the development and utilization of robotic technologies for micro-farms.

<https://uniroma1.zoom.us/j/85770789103?pwd=REk2R3hvOE1YV3pCaTBuQ3RieU1SUT09>

ID: 857 7078 9103 / Passcode: 960236

2ND DAY

link zoom

On Saturday 10th April, presentations focus on questions and approaches concerning conceptual and methodological aspects concerning the understanding and designing environment; a case study of nature based solutions in urban areas; a novel approach to Green Construction - integrated and adaptive systems of design, construction and practices that link architecture, horticulture and agriculture, landscape and ecology; and integrating wildlife into planning and design of open spaces and buildings in cities with the aim to improve on human health.

<https://uniroma1.zoom.us/j/84176511983?pwd=SIIzzZmhuOX-ZzRGpKMU5xeE1WWmlzQT09>

ID: 841 7651 1983 / Passcode: 827307

GREETINGS

Laura Ricci - Sapienza, Italy

CONTRIBUTORS

Alessandra Battisti - Sapienza, Italy

Luca D'Eusebio - Zappata Romana - Hortus Urbis, Italy

Sara Favargiotti - University of Trento, Italy

Alessandro Grettner - Edmund Mach Foundation, Italy

Michael U. Hensel - TU Wien, Austria

Defne Sunguroglu Hensel - TUM, Germany

Katia Perini - UniGe, Italy

Angelica Pianegonda - University of Trento, Italy

Aldo Sollazzo - IAAC Barcelona, Spain

Wolfgang Weisser - TUM, Germany

CONCLUSIONS

Federica Dal Falco - Sapienza, Italy

CITIES, GREEN SYSTEMS, HUMAN HEALTH AND WELLBEING

13:00	Greetings LAURA RICCI Sapienza, Italy
13:05	Welcome and introduction
13:20	Rural Urban Metabolism and food dynamics in the Alpine urban (eco)systems SARA FAVARGIOTTI University of Trento, Italy ANGELICA PIANEGONDA University of Trento, Italy
Biographies	<p>Sara Favargiotti, University of Trento (Italy) sara.favargiotti@unitn.it. Associate Professor of Landscape Architecture at the Department of Civil, Environmental and Mechanical Engineering, University of Trento. Her research and teaching investigates the multiple identities of the landscape with a research by design approach based on transformation through adaptation and innovation. M.Arch in Architecture (Genoa, 2009), international Ph.D. (IUAV, 2014), visiting scholar at the Office for Urbanization (Harvard GSD, 2016), member of the Directive Board of IASLA (since 2018). Member of research projects such as: PRIN Brandig4Resilience (2020-ongoing); EIT Climate-KIC SATURN (2018-ongoing); Trento Urban Transformation (2016-ongoing). Author of numerous essays, she published the book Airport On-hold. Towards Resilient Infrastructures (LIST Lab, 2016). Complete curriculum at: https://webapps.unitn.it/du/en/Persona/PER0188111/Curriculum</p> <p>Angelica Pianegonda, University of Trento (Italy) angelica.pianegonda@unitn.it. Angelica Pianegonda is a research fellow at the Department of Civil Environmental and Mechanical Engineering (DICAM) University of Trento, Italy, where she also graduated in 2019 in Construction Engineering and Architecture. During her Master Thesis, she has taken part to the TRE3 research project (funded by Fondazione Caritro) at the National Research Council of Italy – Trees and Timbers Institute in San Michele all'Adige (TN). She has been collaborating in the research project EIT Climate-KIC SATURN (2018-ongoing), that stands for "System and sustainable Approach to virtuous interaction of Urban and Rural Landscapes". Her main research interests concern landscape ecology, nature based solutions, and sustainable urban-rural development, with a special focus on the regeneration of rural and urban landscapes through enhancing ecosystem services related to the agri-food sector.</p>

13:55	The "One Health" Living-lab of Trentino ALESSANDRO GRETTER Edmund Mach Foundation, Italy
Biography	<p>Alessandro Grettner, Senior Technologist at the Research & Innovation Centre of the Fondazione Edmund Mach, he holds a PhD in Geography (Innsbruck, 2020) and a MSc in Economics (Trento, 1998) and MSc in Environmental Economics (Siena, 2008). He participated in several projects, namely in a series financed by EIT Climate-KIC; he also collaborates with the Head of Centre and Grant Office in creation of international research networks and writing of projects (in particular related to Alpine area). From February 2011 until June 2016 he was a member of the "Landscape Observatory" of Autonomous Province of Trento, as representative of FEM. Since July 2016 he is acting as a co-member of the Action Group n. 7 "Connectivity / Green Infrastructure" of Alpine Macro-Region (EUSALP) on behalf of the Autonomous Province of Trento. His research interests are on Human Ecology, Socio-Economic analysis of rural and mountain territories, landscape governance, planning and sustainable development. He is author and co-author of more than 20 scientific and technical-scientific publications.</p>
14:30	The impact of vegetation types on a modular open structure temperatures in a city: An assessment in Rome ALESSANDRA BATTISTI Sapienza, Italy
Biography	<p>Alessandra Battisti, University of Rome La Sapienza (Italy), Architect, PhD in Environmental Design, Associate Professor in Architecture Technology and Environmental Design, at "Sapienza" Rome University, where she is also: Head of the Master's Degree in Landscape Architecture; Head of the Master's Degree in Architecture Urban Regeneration; Director of the 2nd level Master's degree course in Valorisation and Enhancement of Small Historical Centers; Member of the Faculty Board and Teaching Staff Member of the PhD in Environmental, Technological Design. Since 1992 she has been carrying out research, teaching and experimentation activities on topics such as technological innovation for environmental-ly aware architecture, buildings' ecological and energetic efficiency, bioclimatic approach in design.</p>

15:20	Cultivating cities: Urban gardening's impacts and challenges LUCA D'EUSEBIO Zappata Romana - Hortus Urbis, Italy
Biography	<p>Luca D'Eusebio, Architect, is part of studioUAP which deals with public space. He has written articles in various specialized magazines and published "How to start a vegetable garden or a shared garden" and "Paesaggio Agrario. An unresolved question". Specialist and PH in urban planning, he has taught at Labgov LUISS, at IED Rome, at the faculty of architecture of the La Sapienza and Roma Tre Universities. He was coordinator of the Italia Nostra Onlus Landscape and Territorial office and consultant of the Public Works Senate Committee. He works in the field of architecture and urbanism especially on the design of public space and has been awarded for the participatory processes adopted. He is president and co-founder of Zappata Romana to investigate community and edible gardens in Rome as a collective action for urban public space appropriation and for the development of environmental, economic and social innovative issues. Since 2012 He has been appointed by the Appia Antica Park in Rome to activate an abandoned area where a new public space, the Hortus Urbis, is chorally built and maintained.</p>
15:55	ROMI - RObotics for Microfarms ALDO SOLLAZZO IAAC Barcelona, Spain
Biography	<p>Aldo Sollazzo is a technologist, with expertise in robotics, manufacturing, and computational design. Since 2011, Aldo is Director of Noumena, leading a multi disciplinary team towards the definition of new design strategies informed by tech-driven applications. He is also the Director of Reshape – digital craft community, a distributed platform promoting cutting-edge ideas merging design and manufacturing. At IaaC, Institute for Advanced Architecture of Catalonia, he is directing the Master in Robotics and Advanced Construction, focused on the emerging design and market opportunities arising from novel robotic and advanced manufacturing systems. In the same institution, Aldo has also directed the Global Summer School since 2015. Aldo has been part of the Fab Academy program as a mentor of Fab Academy Paris and Frosinone from 2015 to 2017. In 2019 Aldo received, from the Italian President of the Republic, the title of Knight of the Order of the Star of Italy for the promotion of national prestige abroad as a recognition of his scientific and technological activities.</p>
16:45	Discussion

09:00-12:00	PhD Session Chairpersons: IRENE POLI, CHIARA RAVAGNAN Sapienza, Italy
13:00	Welcome and introduction
13:15	Embedded Architectures - Understanding and Designing Environments MICHAEL U. HENSEL TU Wien, Austria
	<p>Michael U. Hensel is an architect, partner in OCEAN Architecture Environment (www.ocean-a-e.com), coordinating manager and board member of Lamolab Research Centre (https://lamolab.net/), and book series editor of the Springer Nature series Designing Environments. He leads the research department of Digital Architecture and Planning at Vienna University of Technology. His work focuses on performance-oriented architecture and urban design, architecture and environment integration, advanced design computing, data-driven design and trans-scalar and multi-domain modeling.</p>
13:50	Nature-based solutions in urban areas: monitoring the performances of a pilot project built in Genoa (Italy) KATIA PERINI UniGe, Italy
	<p>Katia Perini is assistant professor at the Architecture and Design Department, Polytechnic School of the University of Genoa (Italy). She graduated with honours at the Faculty of Architecture of Genoa in 2008. In 2012 she successfully defended her PhD dissertation "The integration of vegetation in architecture. Innovative methods and tools". She spent some time abroad including a period at the Delft University of Technology (CITG, Department of Materials & Environment) as guest researcher. In 2013 Katia Perini was selected as a Fulbright grantee, under the Fulbright-Schuman Program, with a research project regarding the sustainability of urban areas with New York City as case study. The research was conducted at the Urban Design Lab of Columbia University (NY, USA). In 2016 Katia Perini was at the Technical University in Munich (TUM) Chair of Building Technology and Climate Responsive Design as visiting scholar based on a DAAD (German Academic Exchange Service) Personal award. In 2017 Katia Perini obtained the National Academic Qualification as Associate Professor, released by the Ministry of Education, Universities and Research (Italy). Her research interests include the effects of vegetation (green infrastructure and green envelopes) in the field of environmental and economic sustainability in (of) urban areas and building/urban design. Over 80 publications including peer reviewed articles, books, etc.</p>
	CITIES, GREEN SYSTEMS, HUMAN HEALTH AND WELLBEING

14:25 BREAK

14:40 Ecological Prototypes
DEFNE SUNGUROGLU HENSEL
TUM, Germany

Defne Sunguroğlu Hensel is an architect, partner in OCEAN Architecture | Environment (www.ocean-a-e.com), coordinating manager and board member of LamoLab Research Centre (<https://lamolab.net/>), and book series editor of the Springer Nature series Designing Environments. She is a researcher in the special research area Advanced Computational Design at Vienna University of Technology and in the H2020 FET project Ecolopes at Technical University Munich. Her work focuses on integrative and adaptive architectural design aiming for novel and hybrid building types, especially in green construction with focus on urban ecosystem functions and urban food production. Furthermore, she focuses on advanced design computing, data-driven design and innovative design decision support systems.

15:15 Integrating wildlife into the planning of buildings and open space to improve human health
WOLFGANG WEISSE

TUM, Germany

Biography **Wolfgang Weisser** is head of the Terrestrial Ecology Research Group in the Department of Life Science Systems at the Technical University of Munich (TUM, Germany). He is a biologist interested in developing sustainable land use options. His group investigated the effect of land use on biodiversity, in particular how human land use changes species interactions. Most of the research focuses on insects, but also on other animals. Together with Thomas Hauck he developed the method Animal-Aided Design to integrate animals into landscape architectural designs. He coordinates ECOLOPES and is closely involved in modelling animal populations living on the ecolope.

16:00 Discussion

16:30 Conclusions
FEDERICA DAL FALCO
Sapienza, Italy
CHIARA RAVAGNAN
Sapienza, Italy