

9.00 - 10.00 REGISTRATION
10.00 - 11.00 WELCOME AND OPENING PLENARY
 Room Aula Magna - Edificio 4 - Città Universitaria

Francesco Basile - Rector of the University of Catania
 Enrico Foti - Head of the Department of Civil Engineering and Architecture
 Giuseppe Platania - President of the Engineers Association of Catania
 Giuseppe Piana - President of the National Association of Building Contractors of Catania
INTRODUCTION
 Giuseppe Margani - University of Catania

11:00-13:00 PLENARY SESSION
 Room Aula Magna - Edificio 4 - Città Universitaria
 Chair Annarita Ferrante

TOPIC	
ID	Topic
8	ASSESSING AND MANAGING SEISMIC RISK IN OLD URBAN CENTRES: THE HISTORICAL CITY CENTRE OF COIMBRA, PORTUGAL, AS A CASE-STUDY José Aguado, Tiago Miguel Ferreira and Paulo B. Lourenço
12	ASSESSING URBAN AND BUILDING VULNERABILITIES CONNECTED TO THE EMERGENCY MANAGEMENT: AN INTEGRATED METHODOLOGY. Martina Zorzoli, Giovanni Metelli, Michèle Pezzagno, Giovanni Plizzari and Roberto Busi
28	COLLECTIVE SOCIALIST HOUSING IN ROMANIA – COMPLEX SOLUTIONS FOR SUSTAINABLE UPGRADE, BETWEEN/BESIDES ENERGY IMPROVEMENT AND STRUCTURAL SAFETY Zina Macri

67	SUSTAINABLE ENERGY ACTION PLANS: MONITORING OF IMPLEMENTATION OF STRATEGIES FOR SUSTAINABILITY FOR MUNICIPALITIES IN NORTHERN ITALY Giuliano Dall'O, Luca Sarto, Alberto Pizzi and Sandro Cristina Reggiani
69	A SIMPLIFIED MODEL BASED ON SELF-ORGANIZED CRITICALITY FRAMEWORK FOR THE SEISMIC ASSESSMENT OF URBAN AREAS Annalisa Greco, Alessandro Pluchino, Luca Barbarossa, Ivo Calì, Francesco Martinico and Andrea Rapisarda
102	A METHODOLOGY TO EVALUATE AND REDUCE SEISMIC RISK AT URBAN DISTRICT AND BUILDING LEVEL Chiara Ciatto, Rosa Caponetto, Daniele La Rosa and Ivo Calì

TOPIC
*Resolution of organizational and practical problems
 Economic and financial policies to promote renovation measures
 Strategies for promoting the social sensitivity to prevention actions*

ID	Topic
2	SEISMIC AND ENERGY RENOVATION MEASURES FOR SUSTAINABLE CITIES: A CRITICAL ANALYSIS OF THE ITALIAN SCENARIO Paolo La Greca and Giuseppe Margani
66	A EUROPEAN PROJECT FOR SAFER AND ENERGY EFFICIENT BUILDINGS: PROGET-ONE (PROACTIVE SYNERGY OF INTEGRATED EFFICIENT TECHNOLOGIES ON BUILDINGS' ENVELOPES) Annarita Ferrante, Riccardo Gulli, Giovanni Mochi, Anastasia Fotopoulou, Giovanni Semprini, Lorenzo Badini and Giorgia Predari

LUNCH
14:30-16:30 PLENARY SESSION
 Room Aula Magna - Edificio 4 - Città Universitaria
 Chair Marius Voica

TOPIC
Construction techniques of historic and recent buildings

ID	Topic
6	PROJECTS AND CONSTRUCTION TECHNIQUES IN POST-SEISMIC RECONSTRUCTIONS AT THE BEGINNING OF THE TWENTIETH CENTURY. Marina Pugnaletto and Cesira Paolini
15	THE BUILDING INFORMATION MODELING FOR THE RETROFITTING OF EXISTING BUILDINGS. A CASE STUDY IN THE UNIVERSITY OF CAGLIARI. Giuseppe Desogus, Giuseppe Martino Di Giuda, Giuseppina Monni, Emanuela Quaquero, Antonello Sanna, Lavinia Chiara Tagliabue and Valentina Villa
36	ROLE OF SKY GARDENS IN IMPROVING ENERGY PERFORMANCE OF TALL BUILDINGS Humera Mughal and Rossella Corrao
40	THE RESILIENCE OF TRADITIONAL ARCHITECTURE: THE ANTI-SEISMIC CONSTRUCTIVE SYSTEM OF LEFKADA ISLAND Emilia Garda, Marika Mangosio and Angeliki Vlachou
53	OPTIMIZING ENVIRONMENTAL PERFORMANCE OF HISTORICAL BUILDINGS. TWO CASE STUDIES. Luca Finocchiaro
77	SEISMIC AND ENERGY REFURBISHMENT OF RESIDENTIAL BUILT HERITAGE IN THE MEDITERRANEAN CLIMATE Angelo Salemi, Alessandro Lo Faro, Attilio Mondello, Angela Moschella and Giulia Sanfilippo
86	THERMAL AND ECONOMIC GREEN ROOF PERFORMANCE FOR BUILDING RETROFIT Stefano Cascone, Gaetano Sciuto, Antonio Gagliano and Federico Catania
101	SEISMIC AND ENERGY RENOVATION, COMPARISON BETWEEN THE DESIGN APPROACH IN ITALY AND IN ROMANIA Emil-Sever Georgescu, Mihaela Stela Georgescu, Zina Macri, Edoardo Michele Marino, Giuseppe Margani, Vasile Meita, Radu Pana, Horia Petran, Per Paolo Rossi, Vincenzo Sapienza and Marius Voica

COFFEE BREAK
17:00 - 18:30 - PARALLEL SESSION
 Room Aula IB - Edificio 4 - Città Universitaria
 Chair Emil-Sever Georgescu

TOPIC
Seismic and energy regeneration strategies at district and urban scale

ID	Topic
21	THE COMPLEX, MULTICRITERIAL RENOVATION OF HOUSING DISTRICTS. INTEGRATED CONCEPT OF PROJECTS FOR HOUSES AND CITY. RESULTS OF "SIR RESEARCH PROJECT" IN ROMANIA Mihaela Stela Georgescu, Cristina Victoria Ochinciuc, Carmen Dumitrescu, Codruta Iana, Cerasella Craciun and Ana Opris
68	PROCEDURES FOR A QUALITATIVE ASSESSMENT OF THE SEISMIC VULNERABILITY OF HISTORIC CENTERS. THE CASE STUDY OF ACIREALE (CT). Chiara Circo and Anna Scudero
98	A GREEN INFRASTRUCTURE STRATEGY FOR REDUCING SEISMIC VULNERABILITY AND ENHANCING ENERGY EFFICIENCY IN URBAN CONTEXTS Riccardo Privitera and Daniele La Rosa
105	RECOVERING THE ANCIENT HAMLET BY AN INTEGRATED ENERGY AND SEISMIC PLAN ACTION: THE CASE OF BAIA E LATINA Marina Fumo, Antonella Violano, Antonio Formisano and Giulia Sibilio
107	SEISMIC ASSESSMENT OF TYPICAL MASONRY HISTORICAL RESIDENTIAL BUILDINGS IN CATANIA Grazia Lombardo, Salvatore Caddemi, Annalisa Greco, Ivo Calì, Giuseppe Di Gregorio and Andrea Famà
112	CORRECTIVE REMEDIATION PROPOSALS FOR THE INA CASA DISTRICTS IN MESSINA (1949-1963) Ornella Fiandaca, Raffaella Lione and Fabio Minutoli

17:00 - 18:30 - PARALLEL SESSION
 Room Aula Magna - Edificio 4 - Città Universitaria
 Chair Emanuele Naboni

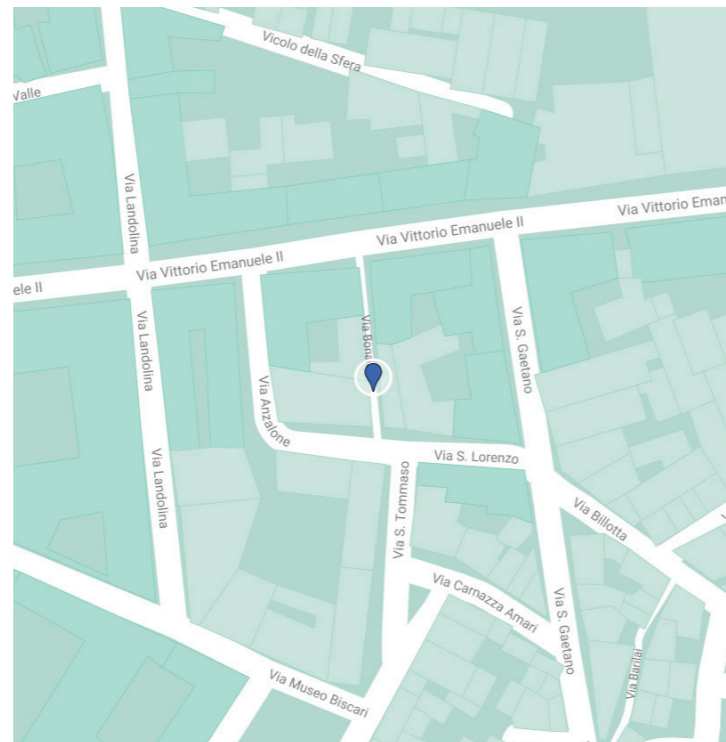
TOPIC	
ID	Topic
29	SUSTAINABLE LOW CO2 EMISSION RETROFIT STRATEGIES OF PUBLIC BUILDING IN MEDITERRANEAN AREA: A CASE STUDY Francesco Nocera, Antonio Gagliano, Maurizio Detommaso, Gianpiero Evola, Luigi Marletta and Manfredi Cannata
50	CRITICAL ISSUES ON INTEGRATED SOLUTIONS FOR SEISMIC AND ENERGY RETROFITTING OF HIGH-RISE BUILDINGS IN REINFORCED CONCRETE WALLS AND PANELS: THE M4 IN TOR BELLA MONACA, ROME. Edoardo Currà, Emanuele Habib, Salvatore Perno and Lorenzo Diana
57	MULTICRITERIA ANALYSIS FOR CHOOSING MAINTENANCE STRATEGIES Maurizio Nicoletta, Claudio Scognamiglio and Alessio Pino

TOPIC	
ID	Topic
91	OPTIMIZATION OF OUTDOOR COMFORT CONDITIONS WITH KINETIC ADAPTIVE SHELTER: THE CASE STUDY OF PIAZZA ARMERINA ARCHAEOLOGICAL SITE Gianluca Rodonò, Emanuele Naboni, Vincenzo Sapienza, Federico Cucchi and Giacomo Macrelli
113	ANALYSIS OF FAILURE IN URBAN ENERGY DISTRIBUTION NETWORKS Alberto Fichera, Mattia Frasca and Rosaria Volpe

TOPIC	
ID	Topic
97	A SMART PREFABRICATION SYSTEM FOR THE INDUSTRIALIZED CONSTRUCTION OF RESILIENT ENERGY-SAVING BUILDINGS Luis Palmero and Graziella Bernardo
104	THE SEVEN-CENTURY ARCHITECTURES: ANTISEISMIC FACADE SOLUTIONS Corrado Fianchino and Eleonora Vinci

20:00 CONFERENCE DINNER

Cappella Bonajuto
 Via Bonajuto 9/13



9:00 KEY LECTURES
 Room Auditorium De Carlo - Monastero dei Benedettini
 Moderator Paolo La Greca

9.00 - 10.00	DESIGN, DISASTERS, DEVELOPMENT* Anna Pavan Ove Arup & Partners - Build Change
10.00 - 11.00	SEISMIC RISK PREVENTION POLICIES Maurizio Milan Milan Ingegneria
COFFEE BREAK	
11.30 - 12.30	VULNERABLE TERRITORIES OF CENTRAL ITALY: ADAPTIVE STRATEGIES FOR COMMUNITY REGENERATION Martina Ruini Mario Cucinella Architects
12.30 - 13.30	Tour Benedettini

LUNCH
14:30 - 16:30 - PLENARY SESSION
 Room Auditorium De Carlo - Monastero dei Benedettini
 Chair Rossella Corrao

TOPIC
Technical solutions, materials and methods for seismic and energy renovation

ID	Topic
5	TABIÀ RENOVATION FOR ALPINE REGION IN ITALY. TRADITIONAL SOLUTIONS AND INNOVATIVE TECHNOLOGIES INTEGRATION. Barbara Gherri, Eva Coisson and Fabio Scola
11	PRESTRESSED TRANSLUCENT PANELS MADE OF INNOVATIVE 3D GLASS COMPONENTS DSC-INTEGRATED, FOR SAFETY AND ACTIVE BUILDING FAÇADES Rossella Corrao

13	IMPROVING THE ITALIAN BUILDING STOCK: ENERGY RETROFIT OF A SINGLE-STOREY PUBLIC BUILDING IN SOUTHERN ITALY Gianpiero Evola, Luigi Marletta, Serena Tamburella and Paolo Girlando
18	"SEISMIC AND ENERGY RETROFITTING" OF THE HISTORICAL CENTRES' BUILDINGS. A CASE STUDY IN ENNA Tiziana Basirico and Daniele Enea
22	STRUCTURE - SPACE - ENVELOPE. BUILDING SOLUTIONS TO MITIGATE URBAN HEAT ISLAND (UHI) EFFECTS Cristina Victoria Ochinciuc and Mihaela Stela Georgescu
33	RENOVATION OF SCHOOL BUILDINGS: ENERGY RETROFIT AND SEISMIC UPGRADE, TWO CASE STUDIES IN MOTTA DI LIVENZA. Tiziano Dalla Mora, Giosuè Boscato, Fabio Peron, Piercarlo Romagnoni, Maria Pinamonti and Lorenzo Teso
37	SEISMIC REHABILITATION OF BUILDING STRUCTURES USING ENERGY DISSIPATION DEVICES Gabriel Danila and Adrian Iordachescu
81	MOULD GROWTH RISK EVALUATION OF INTERNAL INSULATION SOLUTIONS IN A HISTORIC BUILDING UNDER TEMPERATE CLIMATES Andrea Gianangeli, Elisa Di Giuseppe and Marco D'Orazio
100	SEISMIC AND ENERGY RENOVATION: AN INNOVATIVE APPROACH TO HISTORIC PRESERVATION Ivo Calì, Santi Cascone, Dario Distefano, Antonio Gagliano, Giuseppe Perrica, Gianluca Rodonò and Vincenzo Sapienza

COFFEE BREAK

Room Auditorium De Carlo - Monastero dei Benedettini
Chair Edoardo Currà

17:00 - 19:00 - PLENARY SESSION

TOPIC

Decision support tools for the selection of the optimal retrofiting scenario

Diagnostic techniques and numerical models to assess seismic vulnerability and energy performance

- ID 3 TOWARDS THE DEVELOPMENT OF A DECISION SUPPORT SYSTEM (DSS) FOR BUILDING RENOVATION: DOMAIN MAPPING MATRIX (DMM) FOR SUSTAINABILITY RENOVATION CRITERIA AND RENOVATION APPROACHES
Aliakbar Kamari, Rossella Corrao and Poul Henning Kamari
- 26 ENERGY IN TIME. PARAMETERS OF ENERGETIC ACTUALIZATION OF MATERIALS/COMPONENTS
Caterina Claudia Musarella
- 39 URBAN RESILIENCE AND DISASTER PREVENTIVE PLANNING. MANAGE THE PREPARATION TO OPTIMIZE THE RESPONSE IN HISTORICAL TOWNS.
Alessandro D'Amico and Edoardo Currà
- 51 OPTIMAL MEASURES FOR ENERGY RETROFIT ON THE UNIVERSITY BUILDING "EX COTONIFICIO OLCESE" IN VENICE
Tiziano Dalla Mora, Alessandro Righi, Fabio Peron, Piercarlo Romagnoni and Davide Balboni
- 52 ITALIAN SCHOOL BUILDING TOWARD NZEB REQUIREMENTS. THE CASE OF "C. ROSSELLI" HIGH SCHOOL IN CASTELFRANCO VENETO.
Tiziano Dalla Mora, Giulia Masolo, Alessandro Righi, Fabio Peron and Piercarlo Romagnoni
- 55 MULTI-CRITERIA METHODOLOGY TO SUPPORT DECISION MAKING CONCERNING OPAQUE ENVELOPE COMPONENTS
Alessandra De Angelis, Rosa Francesca De Masi, Maria Rosaria Pecce, Silvia Ruggiero and Giuseppe Peter Vanoli

- 79 RADIANT PANELS FOR OUTDOOR HEATING: THEORETICAL AND EXPERIMENTAL ANALYSIS FOR THERMAL COMFORT ASSESSMENT
Giorgio Baldinelli, Antonella Rotili and Francesco Bianchi
- 109 TECTONIC SUSTAINABLE BUILDING DESIGN FOR THE DEVELOPMENT OF RENOVATION SCENARIOS - ANALYSIS OF TEN EUROPEAN RENOVATION RESEARCH PROJECTS
Aliakbar Kamari, Rossella Corrao, Steffen Petersen and Poul Henning Kirkegaard

20:00 - CITY LIFE
VIDEOMAPPING SHOW
Piazza Duomo
NOTTE BIANCA MUSEI
Free entrance to all museums



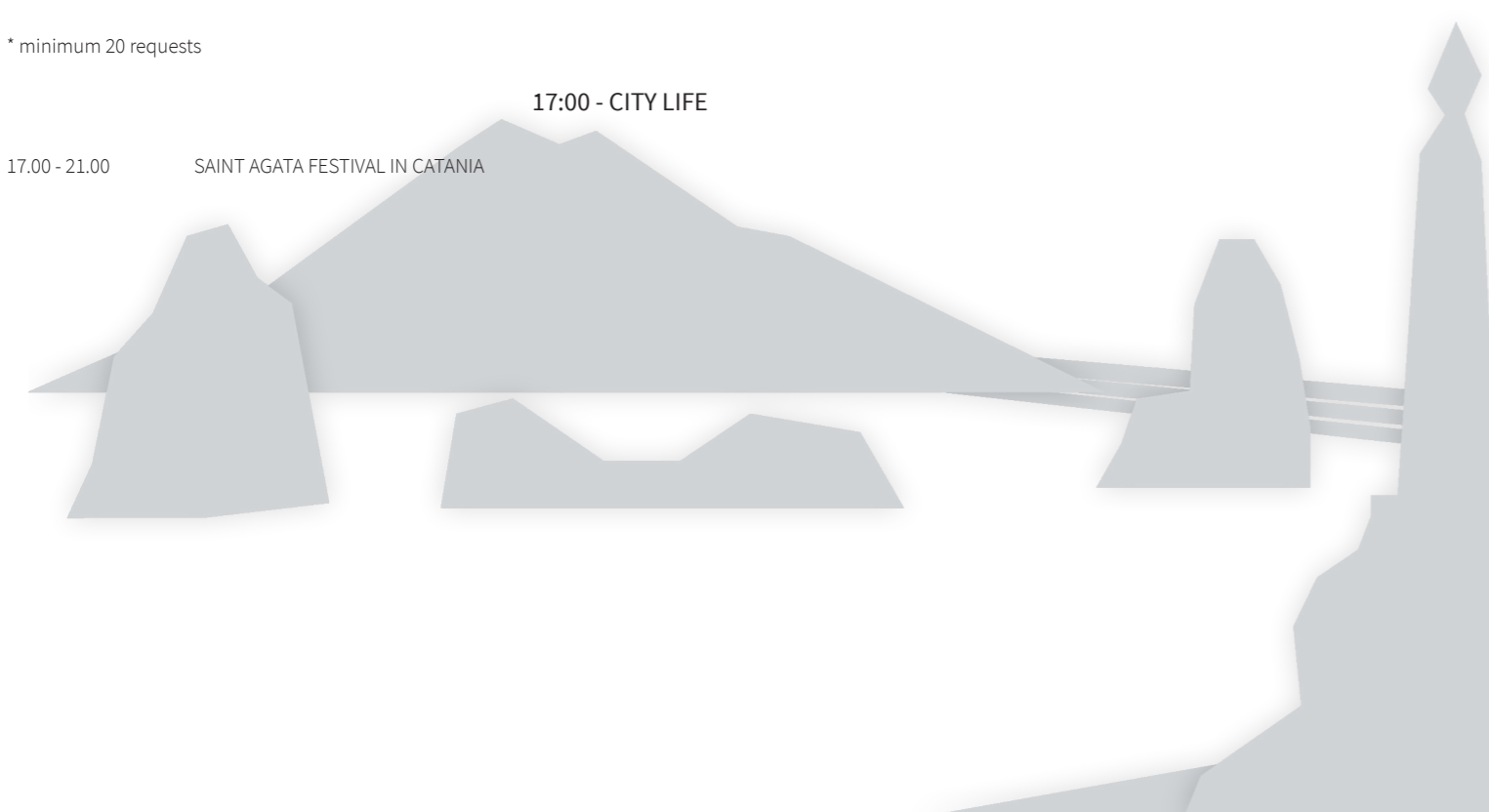
9:00 - TOUR

- 9.00 - 11.30 TOUR OF CATANIA HISTORICAL CENTER or
- 9.30 - 16.30 TOUR OF TAORMINA* or
- 9.30 - 16.30 TOUR OF ETNA*

* minimum 20 requests

17:00 - CITY LIFE

17.00 - 21.00 SAINT AGATA FESTIVAL IN CATANIA



SCIENTIFIC COMMITTEE

- | | | | |
|----------------------|---|-----------------------------|--|
| Giuseppe Alaimo | University of Palermo - Italy | Emanuele Naboni | The Royal Danish Academy of Fine Arts - Denmark |
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organizing



patrons



friends



SEISMIC AND ENERGY RENOVATION FOR SUSTAINABLE CITIES



International Conference Catania - Italy
1st to 3rd February 2018

DETAILED PROGRAMME OF PLENARY/PARALLEL SESSIONS

