



New perspectives for multi-risk assessment and management under climate change

Digital transition, innovative partnerships, future challenges

Bologna Congress Center EX-GAM
P.zza Costituzione, 3

PROGRAM

November 27

9:00 – 14:00 Spoke Meetings

Spoke	Location	Time	Title
VS2	EX-GAM (Sala Blu – Piano Terra)	9:00 – 13:00	Validation of quantitative assessment methods for ground instability scenarios
VS3	Complesso Unione Via Azzo Gardino 33 (Aula 3)	11:00 - 14:00	From seismic and volcanic hazard to vulnerability
VS4	EX-GAM (Sala Cobalto – Piano Terra)	9:30 – 13:30	Addressing emerging hazards contributing to environmental degradation
TS1	EX-GAM (Sala Turchese – Piano Terra)	11:00 – 14:00	The RETURN platform for TS1: from integration of risk storylines to multi-risk data and results sharing, towards the implementation of a decision support tool for effective risk management for urban settlements
TS2	EX-GAM (Sala Plenaria – 1° Piano)	9:30 – 14:30	Integrated tools and methods for the multi-risk assessment of critical infrastructures
TS3	EX-GAM (Sala Ambra – Piano Terra)	11:00 – 14:30	Testing and disseminating innovative strategies for resilience
DS	Complesso S. Giovanni in Monte P.zza S. Giovanni in Monte 2 (Aula Gambi)	11:00 – 13:00	Extreme rainfall over Italy under climate change

For the Spoke meetings at the EX-GAM, a buffet lunch is planned between 13:30 and 14:30.





November 27

15:00 – 15:30 **Opening Session**

Chair: Alberto Montanari, University of Bologna

Institutional greetings:

- Andrea Prota, *President of the RETURN Foundation*
- Simona Tondelli, *Deputy Rector of the University of Bologna*
- Lisa Borgatti, *Deputy Director of the DICAM Department, University of Bologna*
- Daniela Di Bucci, *Civil Protection Department*
- Maria Chiara Carrozza (*video message*), *President of the National Research Council*
- Domenico Calcaterra, *Scientific coordinator of the RETURN Project*

15:30 – 18:00 **Scientific plenary session**

“Climate change adaptation in a multi-risk perspective”

Chair: Marta Della Seta, La Sapienza

- **Strategies and solutions for adaptation and mitigation of risks in the urban context**
Speakers: Maria Fabrizia Clemente (University of Naples), Daniele Vettorato (EURAC)
- **Data and knowledge integration for the infrastructure hazard assessment**
Speakers: Paola Mazzoglio (Politecnico di Torino), Giuseppe Paolo Cammarata (Engineering)
- **Social and physical vulnerability within a multihazard framework in the presence of seismic and volcanic risk, for the purpose of risk and climate change mitigation**
Speakers: Isabella Lapietra (University of Bari), Francesca Linda Perelli (University of Naples)
- **Utilizing natural CO₂ vents as windows into ocean acidification: implications for climate change adaptation in multi-risk marine ecosystems**
Speakers: Cristina Andolina (University of Palermo), Salvatrice Vizzini (University of Palermo)
- **A toolbox for the assessment and enhancement of communities' resilience**
Speakers: Francesca Vigotti (Politecnico di Milano), Riccardo Stupazzini (La Sapienza)

18:00 – 19:30 **Poster Session and discussion with Welcome Drinks**

Poster Session - Topics:

1. Geophysical, land and marine risks
2. Climate and water related risks
3. Seismic risk, risks related to structures, infrastructures and urban areas
4. Environmental risks, social security, communication and public health

Posters will be shown on four different screens in a slide-show mode.

Presentation is not required.





November 28

9:00 – 10:30 Scientific plenary session

“Uncertainty of risk forecasting and predictions”

Chair: *Piero Dellino, University of Bari*

- **Identification of hotspots exposed to multiple risks through climate services**
Speakers: Sonia Silvestri (University of Bologna), Eleonora Dallan (University of Padova)
- **Addressing uncertainties in ground instabilities modelling for different environments: lessons learned from RETURN**
Speakers: Salvatore Martino (La Sapienza), Simone Bizzi (University of Padova)
- **Digital ecosystems for integrated analyses of natural risks**
Speakers: Francesco Ballio (Politecnico di Milano), Alberto Tasso (FadeOut Software S.r.l.)

10:30 – 11:00 Coffee Break

11:00 – 12:00 Round table on Scientific Sessions

An interdisciplinary point of view

Moderator: *Mauro Dolce, President of the ReLUIS Consortium*

Invited speakers:

- *Domenico Calcaterra, University of Naples*
- *Chiara Arrighi, University of Florence*
- *Francesca Comunello, La Sapienza*
- *Andrea Pirni, University of Genova*
- *Marco Marani, University of Padova*

12:00 – 13:00 Poster Session

Posters will be presented in four **thematic sessions**, according to the following topics:

1. Geophysical, land and marine risks (Sala Turchese)
2. Climate and water related risks (Sala Cobalto)
3. Seismic risk, risks related to structures, infrastructures and urban areas (Sala Blu)
4. Environmental risks, social security, communication and public health (Sala Ambra)

Schedule of the presentations is available on the website of the project:

<https://www.fondazionereturn.it/blog/2024/11/07/return-dissemination-workshop-new-perspectives-for-multi-risk-assessment-and-management-under-climate-change-artificial-intelligence-innovative-partnership-future-challenges/>.

Lunch break



**14:30 – 16:30 Dissemination session****“Solutions for mitigating the risk associated to natural and anthropogenic hazards”**

Moderator: Domenico Calcaterra, Scientific coordinator of the RETURN Project

Invited speakers:

- *Jan Seibert, University of Zurich*
“Engaging the crowd for public data collection - potential for natural-hazard risk mitigation and adaptation”
- *Nadya Komendantova, IIASA (International Institute for Applied Systems Analysis)*
“Engagement and communication in disaster risk reduction while using digital tools”
- *Michele Calvello, University of Salerno*
“Trans-disciplinary risk management approaches for Disaster Risk Reduction: The HuT project”
- *Fabio Castelli, University of Florence*
“Mitigation and adaptation to environmental, natural and anthropogenic hazards: multi-risk research perspectives in Fondazione RETURN”

16:30 – 17:00 Coffee Break**17:00 – 18:30 Round table****Multiple environmental risks in Italy: what perspective for the future?**

Moderator: Simona D’Alessio, Journalist

Invited speakers:

- *Daniela Di Bucci, Department of Civil Protection*
- *Felice Monaco, President and Coordinator of the Struttura Tecnica Nazionale, Member of the National Council of Italian Engineers*
- *Andrea Carlesi, Assicurazioni Generali*
- *Antonio Navarra, University of Bologna, President of the Foundation “Centro Euromediterraneo sui Cambiamenti Climatici” (CMCC)*





November 29

9:00 – 11:00 **Environmental risk and the National Recovery and Resilience Plan: an interproject focus**

*Presentations by sister projects financed by the National Recovery plan and forum
Chair: Andrea Prota, University of Naples – President of the RETURN Foundation*

Invited speakers:

- *Grazia Tucci, PE CHANGES – Cultural Heritage Active Innovation for Sustainable Society*
- *Matteo Cervellati, PE9 - GRINS – Growing Resilient, INclusive and Sustainable*
- *Roberto Bellotti, HPC Centro Nazionale di Ricerca in High Performance Computing, Big Data e Quantum Computing*
- *Erasmus Carrera, PE SPACE IT UP*
- *Maria Antonietta Aiello, MOST - Centro Nazionale per la Mobilità Sostenibile*

11:00 – 11:30 **Coffee Break**

11:30 – 13:00 **Poster Session**

Posters will be presented in four **thematic sessions**, according to the following topics:

1. Geophysical, land and marine risks (Sala Turchese)
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Lunch break

14:00 – 14:15 **Poster Award**

14:15 – 16:00 **Interspoke working groups** “Towards a virtual testbed for RETURN”

LINK ONLINE PLENARY SESSION:

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZWY4NDc0ODQtN2I1My00ZmZjLTk5YTEtNGM4ODA5NWM5ZDEx%40thread.v2/0?context=%7b%22Tid%22%3a%22e99647dc-1b08-454a-bf8c-699181b389ab%22%2c%22Oid%22%3a%223d1a9f04-fed9-49f8-9ebb-cef0c9acddb1%22%7d

