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NORISK

1st INTERNATIONAL NORISK Workshop

*The role of structural safety in the design and
assessment of constructions and infrastructures*

4-6 June 2025

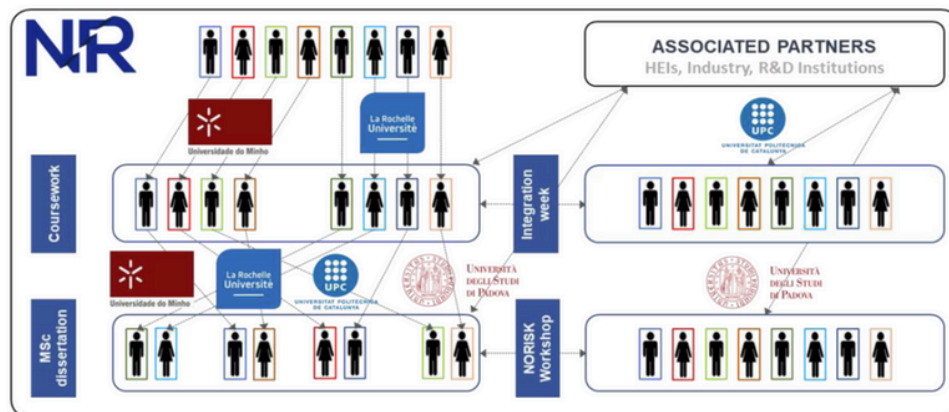


NORISK

The NORISK is an International Master in Risk Assessment and Management of Civil Infrastructures (<https://msc-norisk.org/>) is a highly specialised Master focusing on risk assessment and management of civil infrastructures. The NORISK EMJM central objective is to prepare a new generation of technicians with solid basic training, within an integrative and multidisciplinary context, that allows them to operate in the risk analysis and infrastructure management market, exploring the common denominator that exists for all sectors of civil and critical infrastructures by providing optimized and sustainable solutions.

The NORISK EMJM will provide students with advanced knowledge and skills to work and develop a professional career in the assessment, management, reliability and risk analysis, monitoring, digitalization and intervention on civil infrastructures.

During the 2nd semester, the annual NORISK Workshop will take place, lasting 3 days, aiming at bringing all students once again to participate in a series of lectures from academia and industry experts, a pitch and discussion of the ongoing MSc dissertations, and a job fair.



The technical programme of NORISK Workshop includes:

- Day-1: check-in, welcome reception, visiting to the facilities of the NORISK Hosting Institution;
- Day-2: pitch session and discussion of the ongoing MSc dissertations, job fair;
- Day-3: invited lectures to address relevant topics, job fair event, and closing communications.

The NORISK Consortium is pleased to announce that the 1st International NORISK Workshop will take place in Venice on June 4-6, 2025.

Why in Venice?

- Worldwide example on how civil infrastructures makes accessible life for communities



Libertà Bridge over Venice Lagoon, the longest Italian bridge (3'850 m)



Port of Venice –
400'000 TEU/year



Airport of Venice – 12 bn
passengers/year

- Amazing bridges and infrastructures



Rialto's bridge



Calatrava's bridge



Port of Venice bridge

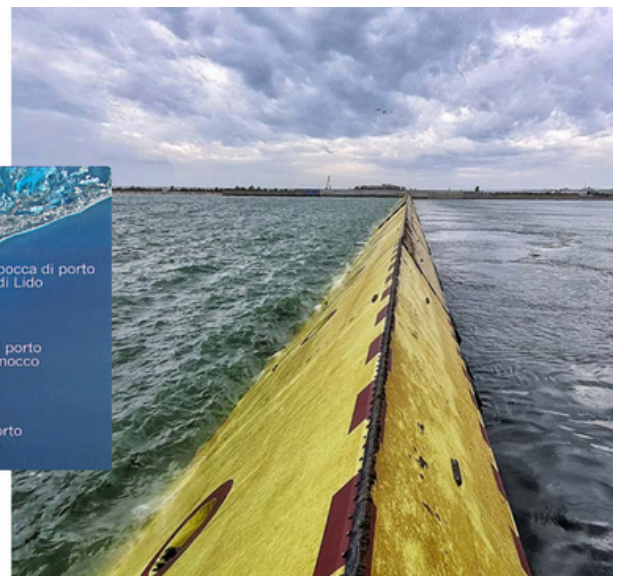


Accademia's bridge



Temporary boat's bridge

- Huge efforts in fighting against climate-change effects



Organizing Committee - NORISK Consortium Management Board



Jose Matos
University of Minho
Coordinator -
NORISK
Coordinator



**Mariano Angelo
Zanini**
University of Padova
Coordinator



**Emilio Bastidas
Ardeaga**
La Rochelle
Université
Coordinator



Jose Turmo
Universitat
Politecnica de
Catalunya
Coordinator

Teaching Staff Involved

UMINHO: Jose Matos, Daniel Oliveira, Jose Sena Cruz, Miguel Azenha, Joel Oliveira, Tiago Miranda, Paula Varandas Ferreira, Helder Sousa, Elisabete Rodrigues Teixeira, Monica Santamaria-Ariza, Mauricio Bonatte

UPADOVA: Mariano Angelo Zanini, Lorenzo Hofer, Lorenzo Brezzi, Klajdi Toska, Flora Faleschini, Carlo Pellegrino, Paolo Salandin, Paolo Simonini

LA ROCHELLE U: Emilio Bastidas-Ardeaga, Rachid Cherif, Ameer Hamami, Erwan Liberge, Jerome Le Dreau, Philippe Turcry, Jerome Lux, Pierre-Yves Mahieux

UPC: Jose Turmo, Milad Komary, Joan Ramon Casas, Rolando Charcon.

Associated Partners

The NORISK boasts a large number of Associated Partners (AP) worldwide (119 up to now), including HEIs, international authorities, end-users, industry and NGO Institutions. Their close participation in Master's activities, namely by providing lectures and seminars (during coursework units, Integration Week and the annual NORISK workshop), co-supervise of MSc dissertations, allowing internships of students during the dissertation period attending the bi-annual general meetings of the Consortium Management Board (CMB), and drafting final course material of the Master will bring also excellence and innovation as well as pragmatic and realistic thoughts.

Associated Partners - Higher Education Institutions



Associated Partners - Industry



Associated Partners - R&D and Non-Governmental Non Profit Organizations



Program

June 4, 2025 | *The first day is for NORISK community only, where 1st NORISK Cohort (A.A. 2024-2025) is welcomed in the Host Institution (U Padova) and Consortium Management Board meeting takes place.*

- h 14:00 NORISK Consortium Management Board meeting
- h 15:45 Coffee break
- h 16:00 Welcome reception of NORISK MSc students in Padova
- h 16:20 Visit to the facilities of the NORISK Hosting Institution (UPADOVA)
- h 17:45 Concluding remarks

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June 5, 2025 | *The second day is open to public participation, and provides a series of lectures from industry experts, local infrastructure owners and academics on the importance of risk assessment and management for civil infrastructures and assets. Some pitch sessions are planned where NORISK students illustrate the ongoing MSc dissertations, and in parallel job fair event with sponsors can take place.*

- h 8:30 **Registration of participants**
- h 9:00 **Welcome and workshop introduction** | Jose Matos, Mariano Angelo Zanini, Andrea Giordano, Carlo Pellegrino, ESRA representative
- h 9:30 **Invited industry experts and local infrastructure authorities** | Concessioni Autostradali Venete, Veneto Strade, Consorzio Venezia Nuova
- h 10:30 Coffee break
- h 11:00 **Walter Salvatore (University of Pisa)** | Real time assessment of existing bridges
Dirk Proske (BFH) | Risk assessment of large number of infrastructure elements
Andrej Anzlin (ZAG) | Enhancing Bridge Assessments through B-WIM Data Analysis
- h 12:15 Pitch session
- h 13:00 Light lunch
- h 14:00 **Sponsor Speech** | iWIM s.r.l.
Fausto Minelli (University of Brescia) | Smart Integration of Structural Health Monitoring and Dynamic Weigh-In-Motion: The Brescia Case Study
Raphael Steenbergen (TNO) | Structural Reliability: a view on a safe and sustainable future
Marco Nale (University of Ferrara) | Resilient critical infrastructures: a multi-level framework for lowland areas
- h 15:30 Coffee break
- h 16:00 Pitch session
- h 16:50 **Enrico Tubaldi (University of Strathclyde)** | Structural issues in hydraulic risk assessment of bridges
Fabio Biondini (Politecnico di Milano) | Life-cycle reliability of aging bridges: Insights on damage modeling and experimental validation
- h 17:40 **Concluding remarks and student awards**
- h 20:00 **Social dinner**



Program

June 6, 2025 | *The third day is open to public participation, and provides a series of lectures mostly from Italian academics with the aim to address the main topic of the event, i.e. the role of structural safety in the design and assessment of constructions and infrastructures. It represents an exciting opportunity for NORISK students as well as external researchers, PhD and MSc students dealing with structural reliability and risk analysis, to have a look into the evolution of codes at the European level, the development of risk-targeted design principles, and the reliability assessment of existing buildings and infrastructures, for both point-like and distributed assets. A final round table will summarize key discussion points.*

Organizers: Mariano Angelo Zanini (University of Padova), Marco Broccardo (University of Trento) & Cristoforo Demartino (Roma Tre University)

h 8:30 **Registration of participants**

h 9:00 **Welcome of participants**

h 9:15 **Michele D'Amato (University of Basilicata)** | Life cycle management of constructions by means of a new reliability-based procedure

Paolo Franchin (University of Rome La Sapienza) | Reliability-based calibration of partial safety factors for existing structures: recent developments in Europe and Italy

Iunio Iervolino (University of Naples Federico II/IUSS Pavia) | Damage-informed ground motion and impact on ShakeMap and fragility modelling

Andrea Dall'Asta (University of Camerino) | Influence of degradation uncertainties on seismic risk of reinforced concrete structures

h 11:00 Coffee break

h 11:30 **Ilaria Venzani (University of Perugia)** | Reliability updating and prediction in Structural Health Monitoring: from Bayesian-based to AI-driven methods

Gerard O'Reilly (IUSS Pavia) | A consistent framework for seismic risk assessment, classification and decision making for existing buildings

Mariano Angelo Zanini (University of Padova) | Reliability-targeted behavior factor definition for reinforced concrete buildings

Cristoforo Demartino (Roma Tre University) | Towards risk-targeted seismic standards: capacity vs hazard modifications

h 13:15 Light lunch

h 14:15 **Marco Broccardo (University of Trento)** | Element- and system- redundancy factors in reliability analysis applications

Emilio Bastidas Ardeaga (La Rochelle University) | Climate change effects and adaptation of infrastructure assets

Lorenzo Hofer (University of Padova) | Probabilistic modelling of catastrophe-bonds for risk transfer

Paolo Gardoni (University of Illinois Urbana-Champaign) | Regional Risk Analysis: Modeling Hazards and Predicting Impacts on Structures and Infrastructure

h 16:00 Coffee break

h 16:30 **Athanasopoulou Adamantia (European Commission JRC)** | Policies and standards for safety and resilience in the built environment

Chiara Bedon (University of Trieste) | Integrated geosciences and earthquake engineering skills for the conservation of historic monumental buildings: CoReng activities in Old Cairo

Alessio Lupoi (University of Rome La Sapienza) | Accurate assessment of structural safety of existing bridges: theory and practice

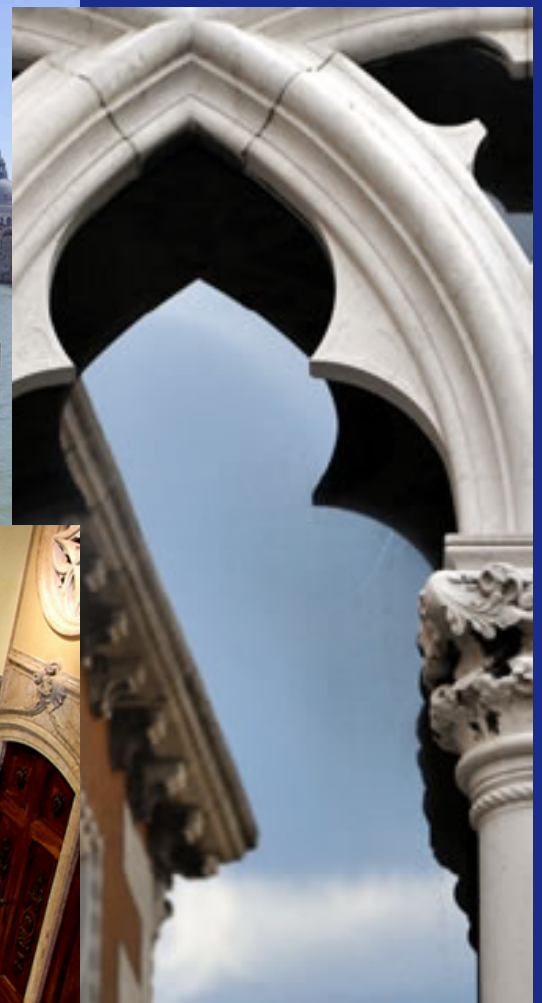
Fabrizio Paolacci (Roma Tre University) | A Machine Learning framework for the Seismic Risk assessment of industrial equipment

h 18:00 **Round table and concluding remarks**

The Venue

VIC (Venice Cultural Initiatives) is a company established in 1999 by the Veneto Institute of Sciences, Letters and Arts with the aim of promoting, implementing and managing cultural activities at Palazzo Franchetti and Palazzo Loredan (the Institute's headquarters for over a century). In addition to promoting and managing cultural initiatives, VIC takes care of the maintenance and operation of the systems at Palazzo Franchetti, Palazzo Loredan and the exhibition space at Zattere. The recent restoration work on the two buildings and their cutting-edge technological equipment now allow VIC to host conferences, exhibitions and other cultural events. The easy accessibility, the nobility of the architecture of the Palaces, the size and articulation of their spaces and the efficient technical equipment have created, in the heart of Venice, a conference and exhibition venue that in just a few years has become one of the most active and prestigious centres of cultural life in the city and the country.

The 1st NORISK Workshop will be held in the heart of the historic city center of Venice at Palazzo Franchetti, Campiello S.Vidal, 2847, venue of the [Veneto Institute of Sciences, Letters and Arts](#).



Patronage



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



DIPARTIMENTO DI INGEGNERIA
CIVILE, EDILE E AMBIENTALE
DEPARTMENT OF CIVIL, ENVIRONMENTAL
AND ARCHITECTURAL ENGINEERING



Universidade do Minho



EUROSTRUCT



Sponsors



Students' award



Coffee break



expinlab
advanced structural control

Registration

On-site* attendance to 1st NORISK Workshop (June 5 and 6) - 90 €

On-site* daily attendance - 50 € | Social dinner - 70 €

(* limited seats - Registration fees are intended without VAT)

For registrations go to this [LINK](#).

For additional informations please contact: info.noriskworkshop@dicea.unipd.it