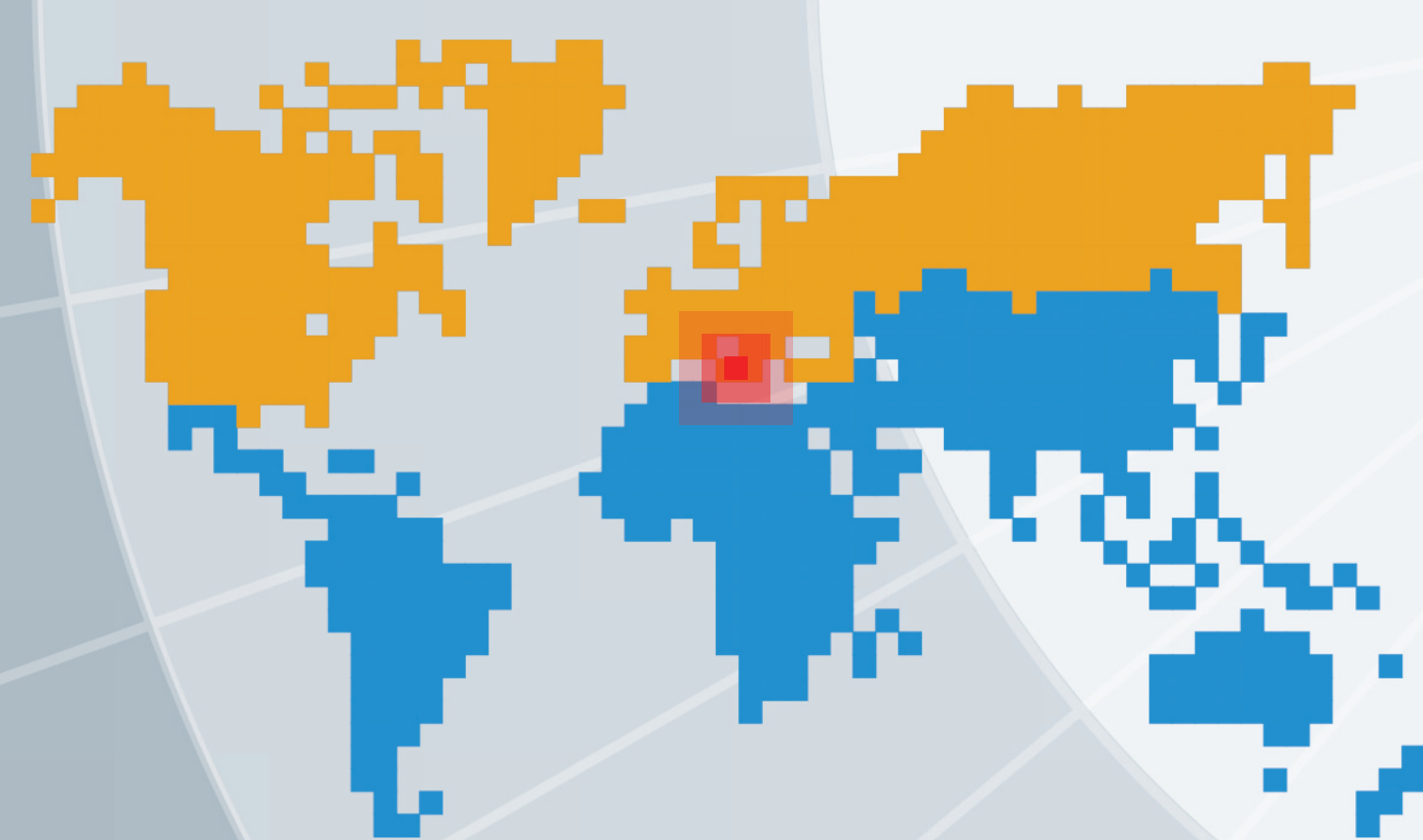




UNESCO Chair on Prevention and Sustainable Management of Geo-Hydrological Hazards



PREVENTION AND SUSTAINABLE MANAGEMENT OF GEO-HYDROLOGICAL HAZARDS



Italy - Florence

University of Florence

Founded in 1321, it is an important and influential centre for research and higher education in Italy, with 1700 academic and 1700 technical and administrative staff members, over 1600 research assistants and PhD students. It offers a wide range of study programmes at various levels and in all areas of knowledge: 126 Degree courses (First and Second Cycle, corresponding to Bachelor's and Master's Degrees) organized in 10 Schools, with a population of about 51000 enrolled students. Researchers at the University of Florence operate within 24 different departments and 40 research structures comprising inter-departmental and inter-university centres as well as specialized research, knowledge transfer and advanced training centres.



Prof. Paolo Canuti Prof. Nicola Casagli

Paolo Canuti is the UNESCO Chairholder at the University of Florence, former Professor of Engineering Geology and Hydrogeology and Past President of the International Consortium of Landslides (ICL). He founded the Engineering Geology group at the University of Florence, which is now composed of more than fifty researchers.

Nicola Casagli is full professor of Engineering Geology at the University of Florence, Earth Sciences Department. He is Vice-president of the International Consortium on Geo-disaster Reduction (ICGdR) and Vice-president for Europe of the ICL. He is member of the National Commission for the Prevention of Major Risks of the Italian Government.

<http://unesco-geohazards.unifi.it>

TO PROMOTE RESEARCH AND DEVELOPMENT FOR THE PREVENTION AND MANAGEMENT OF GEO-HYDROLOGICAL HAZARDS, IN ORDER TO SUPPORT POLICIES AND ACTIONS OF RISK REDUCTION

SUMMARY

Geo-hydrological hazards are a major threat to human life, property, cultural heritage and the natural and built environments. Risk arises from the interplay of physical processes with social and cultural factors (urbanization, emergency planning, risk preparedness and knowledge). The Chair aims at the implementation of the Sendai Partnership 2015-2025, launched at the World Conference on Disaster Risk Reduction in Sendai by the International Strategy for Disaster Reduction (ISDR) and by the International Consortium on Landslides (ICL), for global promotion of understanding and reducing landslide disaster risk (also signed by UNESCO, the Italian Government and UN organizations). The Chair has been established at the Department of Earth Sciences (DST-UNIFI) and the Department of Civil and Environmental Engineering (DICEA-UNIFI). The DST-UNIFI is World Centre of Excellence (WCoE) on Landslide Risk Reduction (since 2008), member of the ICL (since its foundation in 2002), member of the International Consortium on Geodisaster Reduction (ICGdR) (since 2014), founding member of the Global Alliance of Disaster Research Institutes (GADRI) (since 2015).

Chair partners and supporters



CHAIR SPECIFIC OBJECTIVES

To promote the development of innovative technologies for the prevention and mitigation of geo-hydrological hazards: i) Research & Technological Development activities (monitoring and mapping, remote sensing & Earth Observation, development of prototypes, forecasting models); ii) Transfer of Knowledge (stakeholder workshops on geo-hydrological hazard assessment and risk reduction); To develop tools and procedures for supporting risk reduction policies and emergency management for the safety of human life: i) Early warning systems (EWS) toolkits designed for geo-hydrological hazard; ii) Resilience Enhancement (toolkits for disaster response preparedness, building resilience of Megacities and rural

communities); iii) Best practices of risk mitigation (toolkits and handbooks for risk awareness and risk reduction; emergency response simulation exercises);



To promote the protection of cultural heritage threatened by geo-hydrological hazards: i) Safeguard of cultural heritage at risk; ii) Capacity Building (short-term and practical field training); iii) Dissemination (international conferences, guidelines on best practices, book series); To promote research at international level by offering scientific facilities to post graduated students and visiting researchers: i) Scientific Networking (yearly post graduate research training programme, visiting professorships and academic exchanges, UNESCO Chair PhD grants); ii) Establishment of exchange programs for

early-stage researchers and virtual centre fro cross-fertilization of knowledge; iii) Professional Training and continuous education (risk education stages, joint field missions, professional handbooks and manuals). All of the Chair objectives will be focused mainly in less developed countries.



MULTIDISCIPLINARY TRAINING

The Chair organizes a new International Academic Master Degree (in English language) on Geoenvironment, with the joint competences of the all core members of the Chair, mainly focusing on training carried out by experts on prevention, management and mitigation of geo-hydrological hazards.