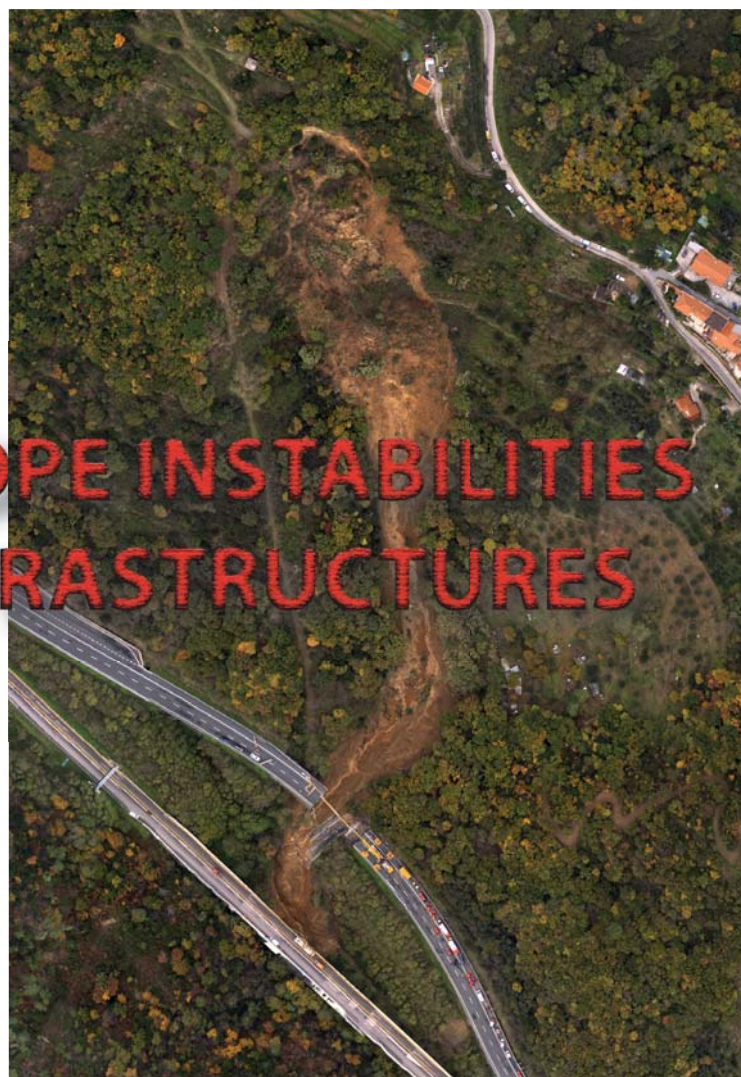




FIRST SUMMER SCHOOL OF THE INTERNATIONAL ASSOCIATION FOR ENGINEERING GEOLOGY AND THE ENVIRONMENT

Aosta Valley (ITALY) 13 - 18 July 2020



IMPACTS OF SLOPE INSTABILITIES ON LARGE INFRASTRUCTURES

The school is dedicated to PhD students in
Earth Sciences and Engineering Geology

NO REGISTRATION FEE IS REQUIRED

The number of participants is limited
Application deadline: March 30, 2020

For more information:
www.iaeg.info
sciaeg@irpi.cnr.it

Marco Alderighi
Giovanni Crosta
Mark Diederichs, Jean Hutchinson
Franco Gianotti
Daniele Giordan
Michel Jaboyedoff
Vassilis Marinou
Farrok Nadim
Raffaele Rocco, Davide Bertolo
Fabrizio Troilo
Christian Zangerl
Francesco Zucca

LECTURERS

Univ. of Aosta Valley, Italy
Univ. of Milano Bicocca, Italy
Queen's University, Canada
Univ. of Torino, Italy
CNR IRPI, Italy
Univ. of Lausanne, Switzerland
Aristotle Univ. of Thessaloniki, Greece
Norwegian Geotechnical Institute, Norway
Aosta Region Administration, Italy
Fondazione Montagna Sicura, Italy
Univ. of Nat. Res. and Life Sciences, Austria
Univ. of Pavia, Italy

FIELD TRIP

Beauregard Dam, Valgrisenche

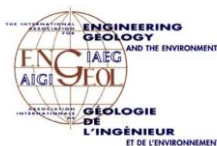
Mont Blanc Tunnel, Skyway, Mont de La Saxe rockslide, Planpincieux glacier

ORGANIZED AND SUPPORTED BY



ENDORSED BY





FIRST SUMMER SCHOOL OF THE INTERNATIONAL ASSOCIATION FOR ENGINEERING GEOLOGY AND THE ENVIRONMENT

IMPACT OF SLOPE INSTABILITIES ON LARGE INFRASTRUCTURES

Among the most essential activities of engineering geology, there is proactive support in correct planning, realization and of course maintenance of large infrastructures.

Large infrastructures (eg. dams, bridges, tunnels) are as a rule, often realized in complex environments, where number of geological and natural risks (geo status, processes, and events) and their interplay, represent a potential threat to the functionality and safety of infrastructures, workers and users, and as a consequence to the health of citizens as well as to the welfare and functions of communities and their economy. The European Alpine environment represents an excellent example in this sense: complex geological setting and the presence of different slope instabilities together with extreme climate events can hamper the construction and pose at risk the management of infrastructures during their life.

In 2020 the first official IAEG Summer School is organized in the Aosta Valley region, in the North West of Italy, and is indeed aimed to describe the possible impacts of different infrastructures like dams, tunnels, and other construction realized in the last century in an alpine region. The school will be focused on the description of impacts, but it also will put attention towards correct approaches for the definition of the geological model, the design of the infrastructure, its maintenance, and besides on the proper communication efforts.

The IAEG Summer School participation is free of charge. The number of participants is limited to 30 people, and primarily reserved for Ph.D. students. Post Doc and Master degree students will be considered if places would be available.

SCIENTIFIC COMMITTEE: Giovanni Crosta, Daniele Giordan, Francesco Zucca, Jean Hutchinson, Jean Alain Fleurisson, Vassilis Marinou, Haris Saroglou, Akos Torok

ORGANIZING COMMITTEE: Daniele Giordan, Giovanni Crosta, Francesco Zucca, Marco Alderighi, Raffaele Rocco, Davide Bertolo, Jean Pierre Fosson, Niccolò Dematteis

ORGANIZED AND SUPPORTED BY



Istituto di Ricerca per la Protezione Idrogeologica



Consiglio Nazionale delle Ricerche



UNIVERSITÀ DELLA
VALLE D'AOSTA
UNIVERSITÉ DE LA
VALLÉE D'AOSTE



CVA

ENDORSED BY

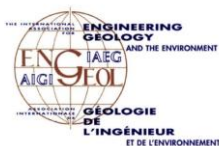


Région Autonome
Vallée d'Aoste



Regione Autonoma
Vallée d'Aoste





FIRST SUMMER SCHOOL OF THE INTERNATIONAL ASSOCIATION FOR ENGINEERING GEOLOGY AND THE ENVIRONMENT

SUMMER SCHOOL PROGRAM

13 – 18 July, 2020

Monday

16-18.30 Summer school registration

Tuesday (Summer school introduction)

9.30 – 10.00 Introduction to the IAEG Summer School and presentation of IAEG activities

10.00 -10.30 Welcome to the Aosta Valley Region (Raffaele Rocco)

10.30-11.00 Coffee break

11.00-12.00 Introduction to geology and geomorphology of the Aosta Valley Region (Franco Gianotti)

12.00 – 13.30 Lunch

13.30-15.15 Engineering Geology, Structures and Infrastructures, Risk and Cost-Benefit Analysis (Farrok Nadim)

16.30-18.00 Poster Ice breaker presentations (5-10 minutes presentation of every participant) to be defined according to the PhD-PostDoc student distribution

Wednesday (Impacts assessment and monitoring solutions of slope instabilities)

9.00-10.45 Deep seated gravitational slope deformations in the Alps (Giovanni Crosta)

11.15-13.00 Rockfalls risk assessment (Michel Jaboyedoff)

13.00-14.30 Lunch

14.30-16.15 High mountains glacial instabilities and possible impacts (Fabrizio Troilo)

16.30-18.15 Monitoring solutions for slope instabilities (Christian Zangerl)

ORGANIZED AND SUPPORTED BY



Istituto di Ricerca per la Protezione Idrogeologica



Consiglio Nazionale delle Ricerche



UNIVERSITÀ DELLA
VALLE D'AOSTA
UNIVERSITÉ DE LA
VALLÉE D'AOSTE



CVA

ENDORSED BY

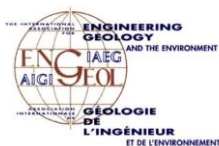


Région Autonome
Vallée d'Aoste



Regione Autonoma
Valle d'Aosta





FIRST SUMMER SCHOOL OF THE INTERNATIONAL ASSOCIATION FOR ENGINEERING GEOLOGY AND THE ENVIRONMENT

Thursday - Field trip

Giordan, Crosta, Bertolo, Zucca - Mont Blanc Tunnel, Skyway, Mont de La Saxe Rockslide, Planpincieux glacier

Friday (design, construction, maintenance, and economic impact evaluation of large infrastructures)

9.00-10.45 The importance of a reliable geological model for a good design of large infrastructures (Jean Hutchinson)

11.15-13.00 Construction of large infrastructures in complex geology (Vassilis Marinos)

13.00-14.30 Lunch

14.30-16.15 The importance of a correct maintenance of large infrastructures: case studies and best practice

16.30-18.15 Feasibility study and cost/benefit economic evaluation of large infrastructures (Marco Alderighi)

Saturday - Field trip

Giordan - Interaction between the Beauregard Dam and deep-seated gravitational slope deformation

ORGANIZED AND SUPPORTED BY



Istituto di Ricerca per la Protezione Idrogeologica



Consiglio Nazionale delle Ricerche



UNIVERSITÀ DELLA
VALLE D'AOSTA
UNIVERSITÉ DE LA
VALLÉE D'AOSTE



CVA

ENDORSED BY



Région Autonome
Vallée d'Aoste



Regione Autonoma
Vallée d'Aosta

