

Program**SEISMOLOGY@SCHOOL
COURSE PROGRAM**

**Hes-so Valais-Wallis
Aula François- Xavier Bagnoud
Sion, 20-24 October 2014**

**SUNDAY – October 19, 2014**

Transportation from Sion train- station until Hotel “Hôtel Chalet Royal” in Veysonnaz

18.00 : Welcome

19.30 : Registration

20.00 : Dinner “Hôtel Chalet Royal ” restaurant

MONDAY – October 20, 2014

9.00: Welcome and Introduction

François Seppey, Director of the Hes-so Valais
Stefan Wiemer, Director of the SED

Session 1: Introduction in Seismology and Geodynamics

9.30: Earthquakes and waves

Prof. Stefan Wiemer, Director of the SED

10.30: Evolution of plates tectonic and Seismology

Prof. Jean-Pierre Burg, ETH Zürich, Switzerland

11.30: Coffee Break

12.00: How Earthquakes occur?

Prof. Jean-Pierre Burg, ETH Zürich, Switzerland

13.00: Lunch break Hes-so restaurant

Session 2: Bringing seismology into the classroom

14.00: Seismology@School : The European experience, now and future

Dr. Paul Denton, British Geological Survey, UK

15.00: Classroom hands-on activities (Gr. A part I: Data, picking waves, earthquake localization, tectonic)

Dr. Stefano Solarino, INGV, Italy

15.00: Classroom hands-on activities (Gr. B part II: Seismic instruments)

Dr. Joseph Moerschell, Hes-so, Switzerland

15.00: Classroom hands-on activities (Gr. C part III : Modeling earthquake, using data modeling)

Dr. Jean-Luc Berenguer, CIV Valbonne, France

15.00: Classroom hands-on activities (Gr. D part IV: Modeling earthquake, seismic signal processing)

Dr. Paul Denton, British Geological Survey, UK

16.30: Coffee Break

17.00: Classroom hands-on activities (Gr. B part I: Data, picking waves, earthquake localization, tectonic)

Dr. Stefano Solarino, INGV, Italy

17.00: Classroom hands-on activities (Gr. C part II: Seismic instruments)

Dr. Joseph Moerschell, Hes-so, Switzerland

17.00: Classroom hands-on activities (Gr. D part III: Modeling earthquake, using data modeling)

Dr. Jean-Luc Berenguer, CIV Valbonne, France

17.00: Classroom hands-on activities (Gr. A part IV: modeling earthquake, seismic signal processing)

Dr. Paul Denton, British Geological Survey, UK

19.00: Dinner Hes-so restaurant



TUESDAY- October 21, 2014

Session 3: Observation, measurements and natural hazard

9.00: From site effects to induced phenomena: liquefaction and triggered landslides

Prof. Donat Fäh, ETH Zürich, Switzerland

10.00: From site effects to induced phenomena: liquefaction and triggered landslides

Prof. Donat Fäh, ETH Zürich, Switzerland

11.00: *Coffee Break*

11.30: Seismic risk in Alpine structure

Dr. Stefano Solarino, INGV, Italy

12.30: Seismology@School : The European experience, now and future

Dr. Paul Denton, British Geological Survey, UK

13.30: *Lunch break Hes-so restaurant*

Session 4: Bringing seismology into the classroom

14.30: Classroom hands-on activities

(Gr. C part I: Data, picking waves, earthquake localization, tectonic)

Dr. Stefano Solarino, INGV, Italy

14.30: Classroom hands-on activities

(Gr. D part II: Seismic instruments)

Dr. Joseph Moerschell, Hes-so, Switzerland

14.30: Classroom hands-on activities

(Gr. A part III: Modeling earthquake, using data modeling)

Dr. Jean-Luc Berenguer, CIV Valbonne, France

14.30: Classroom hands-on activities

(Gr. B part IV: Modeling earthquake, seismic signal processing)

Dr. Paul Denton, British Geological Survey, UK

16.00: *Coffee Break*

16.00: Visite des premières expériences du CPPS dans les locaux de la Hes-so

Open public Conference:
Aula François- Xavier Bagnoud

17.00: François Seppey: CPPS Introduction

Director of the engineer school: Hes-so Valais -Wallis

17.30: Jean-Marie Cleusix: CPPS and EPFL campus

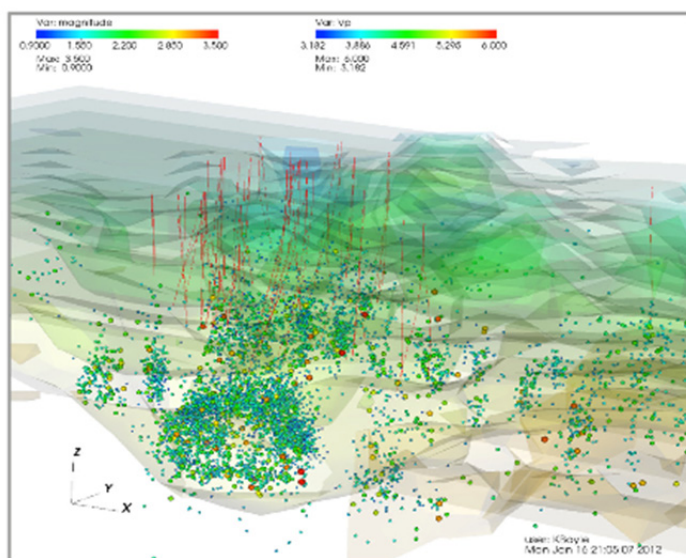
Head of department of Education and Security.

17.45: Marcel Maurer : EPFL campus and Sion

President of the City of Sion

18.00: Seismic risk and geothermal energy

Prof. Domenico Giardini, ETH Zürich, Switzerland



INVITATION

Conférence

"Seismic risk and geothermal energy"

Prof. Domenico Giardini

ETH Zürich

Mardi 21 Octobre 2014
17h
Aula François-Xavier-Bagnoud
Rte du Rawyl , 1950 Sion

 SED
 Schweizerischer Erdbebendienst
 Swiss Seismological Service

 Hes-so VALAIS WALLIS

 NERA

 ETH zürich

 Seismo at School

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19.30: Aperitif-dinner Hes-so restaurant (offert by Sion City)

WEDNESDAY October 22, 2014

Session 5: Seismic Risk Mitigation

9.00: Defeating Earthquakes: How to build?

Prof. Bozidar Stojadinovic, ETH Zürich, Switzerland

10.00: Expected Earthquakes and Seismic Risk Mitigation in Palestine

Prof. Jalal Al Dabbeek, UPDRR, Palestine

11.00: Coffee Break

11.30: Community Earthquake Preparedness and Disaster Education in Turkey

Assoc.Prof.Dr Gülüm Tanircan, Kandilli Earthquakes center, Istanbul, Turkey

12.30: Community Earthquake preparedness and response for a Kibbutz (Sde Eliahu)

Dr. Gilles Hillel Wust-Bloch, TAV, Israel

13.30: Lunch break Hes-so restaurant

Session 6: Bringing seismology into the classroom

14.30: Micro-earthquakes and their applications

Dr. Marianne Marot, Géo-azur Sophia-Antipolis, France

15.30: Classroom hands-on activities

(Gr. D part I: Data, picking waves, earthquake localization, tectonic)

Dr. Stefano Solarino, INGV, Italy

15.30: Classroom hands-on activities

(Gr. A part II: Seismic instruments)

Dr. Joseph Moerschell, Hes-so, Switzerland

15.30: Classroom hands-on activities

(Gr. B part III: Modeling earthquake, using data modeling)

Dr. Jean-Luc Berenguer, CIV Valbonne, France

15.30: Classroom hands-on activities

(Gr. C part IV: Modeling earthquake, seismic signal processing)

Dr. Paul Denton, British Geological Survey, UK

17.00: Coffee Break

17.30: Experiments, posters, made by teachers and/or students

19.00: Dinner Hes-so restaurant

THURSDAY October 23, 2014

Session 7: Seismic Risk Assessment

9.00: The role of numerical simulations on hazard and risk assessment

Dr. Luis A. Dalguer, Swissnuclear, Switzerland

10.00: Extreme consequences of earthquakes:

Dr. Arnaud Mignan, ETH Zürich, Switzerland

11.00: Coffee Break

11.30: Earthquake risk in building codes and beyond

Dr. Blaise Duvernay, BAFU, Switzerland

12.30: Earthquake risk in building codes and beyond

Dr. Roberto Peruzzi, Bureau d'ingénieurs civils Kurmann & Cretton SA, Switzerland

13.30: Lunch break Hes-so restaurant

Session 8: Teachers' projects

14.30: Seismology@school network, 'staying in touch'

Dr. Paul Denton, British Geological Survey, UK

15.30: Teachers projects

Caroline, Ian and Gordon, British Geological Survey, UK

16.15: Teachers projects

17.00: Visite de la vieille ville de Sion

19.00: Visit cave of vine in Wallis and Diner (Gala diner by NERA)

FRIDAY October 24, 2014

Session 9: Field trip

9.00: Field trip departure:

This fieldtrip aims to discuss the structure of the Alps in the area of Sion (Valais, Suisse).

Special emphasis will be placed on brittle structures such as faults. Several faults can be observed or postulated in the area.

Their history can be long and complex. Some are probably in relation to deposition of sediments during the Mesozoic or Cenozoic others are related to the Alps formation. Some sets could be very young in the Alpine kinematics and are compatible with the present day stress regime.

Consequences of the 1946 Sierre earthquake will be examined.

If weather conditions are good enough, a visit to the "Six des Eaux Froides" rock falls and to the nearby Tseuzier dam site is planned.

Prof. Jean-Luc Epard, University of Lausanne, Switzerland

13.00: Lunch break picnic

17: Return

18.00: Seismology@school network, 'staying in touch'

Dr. Paul Denton, British Geological Survey, UK

18.30: Evaluation session and closure

19.00 Dinner "Hôtel Chalet Royal" restaurant

Seismic Tomography using micro-earthquakes : Chilean subduction zone case study

Dr. Marianne Marot, Géo-Azur, Sophia-Antipolis, France

Earthquake Early Warning Systems: Challenges and Benefits

Dr. Gilles Hillel Wust-Bloch, TAV, Israel