

Corinth Rift Laboratory School – 2022

(Patras-Nafpaktos September 23-27, 2022)

Program

Friday September 23, 2022

Department of Physics, University of Patras

- 13:00 – 13:30** **Welcome to the CRL School 2022**
- 13:30 – 14:00** **Why CRL?**
Pascal Bernard, IPGP, Paris, France
- 14:00 – 14:30** **Understanding the physics of earthquakes from the smallest to the largest and the growth of faults in the western gulf of Corinth**
Athanasios Ganas, National Observatory of Athens, Greece
- 14:30 – 15:00** **The geodetic monitoring of the Corinth Rift Observatory with GPS and SAR interferometry**
Pierre Briole, CNRS, Paris, France
- 15:00 – 15:30** **Break**
- 15:30 – 16:00** **Seismic Parameters and Microseismicity in the Gulf of Corinth**
Eleftheria Papadimitriou & Vasilis Karakostas, Aristotle University of Thessaloniki, Greece
- 16:00 – 16:30** **Large Earthquakes and Focal Mechanisms in the Gulf of Corinth**
George Kaviris, National & Kapodistrian University, Athens, Greece
- 16:30 – 17:00** **Off-shore faults imaging and monitoring in the Corinth Rift**
Maria Geraga, University of Patras, Greece
- 17:00 – 17:30** **The seismic monitoring in the Corinth Rift Observatory**
Christian Beck, Université de Savoie, France
- 17:30 Departure to Nafpaktos (Akti Hotel)**

Saturday September 24, 2022

08:30 Departure from Akti Hotel

- 08:45 – 09:15** **Welcome**
- 09:15 – 09:45** **Near Fault Observatories**
Gaetano Festa, University of Naples Federico II, Italy
- 09:45 – 10:15** **Tectonics, structural setting and tectono-sedimentary processes in the Corinth Rift**
Haralambos Kranis, National & Kapodistrian University, Athens, Greece
- 10:15 – 10:45** **CRL offshore tectonics and deformation**
Aurélia Hubert-Ferrari, University of Liège, Belgium
- 10:45 – 11:15** **Relative sea level changes in the Corinth Gulf during the late Holocene**
Niki Evelpidou & Anna Karkani, National & Kapodistrian University, Athens, Greece
- 11:15 – 11:45** **Break**
- 11:45 – 12:15** **Seismological network of CRL and phase picking**
Anna Serpetsidaki, University of Patras, Greece
- 12:15 – 12:45** **Ground acceleration produced by earthquakes and their local amplifications depending on the properties of the underlying soils**
Ioannis Kassaras, National & Kapodistrian University, Athens, Greece
- 12:45 – 13:45** **Lunch Break**
- 13:45 – 15:45** **Hand-on GNSS instruments – learn how to manipulate a GNSS instrument**
Emilie Klein, CNRS, Paris, France
Panagiotis Elias, National Observatory of Athens, Greece
- 15:45 – 16:15** **Break**
- 16:15 – 17:15** **Hand on simple seismic software package provided in the CRL portal**
George Kaviris & Ioannis Spingos, National & Kapodistrian University, Athens, Greece
- 17:15 – 18:45** **Presentations by the students**
3mn per student + questions

Sunday September 25, 2022

08:30 Departure from Akti Hotel

08:30 – 13:30 **Field trip at Psaromita (GNSS and seismic station), geologic stops along the journey**

Thanassis Ganas, National Observatory of Athens, Greece

Christian Beck, Université de Savoie, France

Emilie Klein, CNRS, Paris, France

13:30 – 15:00 **Lunch Break**

Afternoon: Nafpaktos

15:00 – 15:30 **Earthquakes in the classroom – Part 1**

Francesca Cifelli, Roma TRE University, Rome, Italy

15:30 – 16:00 **Earthquakes in the classroom – Part 2**

Francesca Cifelli, Roma TRE University, Rome, Italy

16:00 – 16:30 **Tuned in to the Earth: Using data online at school**

Jean-Luc Berenguer, University Côte d'Azur / EGU, France

16:30 – 17:00 **Break**

17:00 – 17:30 **The earthquake suitcase**

Vasiliki Kouskouna, National & Kapodistrian University, Athens, Greece

17:30 – 18:00 **Diffusion of Models and Teaching Tools (SEISMOBOX etc) in Hellenic schools**

Fotis Danaskos, 8th Junior - Senior High School in Halandri, Greece

18:00 – 18:30 **Incorporating Models and Teaching Tools into classroom**

Kiki Makri, National Observatory of Athens, Greece

Monday September 26, 2022

08:30 Departure from Akti Hotel

School Teachers

08:30 – 12:30 **The School teachers will have a class in a Senior High School in Nafpaktos**

University Students

09:00 – 09:30 **Quantification of N. Peloponnese shoreline displacement using very high spatial resolution remote sensing data**

Emmanouel Vasilakis, National & Kapodistrian University, Athens, Greece

09:30 – 10:00 **Ground Deformation Studies in Seismic Active Areas using Local GPS/GNSS networks. The Case of Central Ionian Islands and Patras Gulf**

Vasilios Sakkas, National & Kapodistrian University, Athens, Greece

10:00 – 10:30 **Introduction to satellite SAR interferometry**

Panagiotis Elias, National Observatory of Athens, Greece

10:30 – 11:00 **Platform-based Technology and Earth Observation Services in Response to Geohazards**

Michael Foumelis, Aristotle University of Thessaloniki, Greece

11:00 – 11:30 **Break**

11:30 – 12:00 **Induced seismicity: Earthquakes caused by human activity**

George Tsoflias, The University of Kansas, USA

12:00 – 12:30 **TBD**

TBD

12:30 – 14:30 **Lunch Break**

Both University Students and Teachers

14:30 – 15:00 **The QGIS software a free and powerful geographical information software – Plotting the routes of the morning GNSS survey with that software**

Antonios Mouratidis, Aristotle University of Thessaloniki, Greece

15:00 – 17:00 **Hands-on Geohazard Exploitation Platform**

Michael Foumelis, Aristotle University of Thessaloniki, Greece

20:30 Official dinner of the CRL School 2022

Tuesday September 27, 2022

08:30 Departure from Akti Hotel

Laboratory of Seismology, University of Patras

- 09:30 – 10:00** **Seismological studies in the broader CRL region**
Zafireia Roumelioti, University of Patras, Greece
- 10:00 – 10:30** **Physical mechanisms behind seismic site response - Some examples from Aegion**
Olga Ktenidou, National Observatory of Athens, Greece
- 10:30 – 11:00** **Structural morphology and geometric control of the Rio-Antirrio bridge**
Akis Panagis, GEFYRA S.A., Greece
- 11:00 – 11:30** ***Move from Seismology Laboratory to Department of Geology***
- 11:30 – 12:30** **Recent sedimentary processes in the Gulf of Corinth. Seismic and aseismic turbidites**
Spyros Sergiou, University of Patras, Greece
- 12:30 – 13:30** **Lunch at the cafeteria near the department of Physics**
- 13:30 – 14:30** ***Drive to the Helike Fault***
- 14:30 – 16:00** **Visit of the Helike fault near Aigion**
Athanasios Ganas, National Observatory of Athens, Greece
- 16:00 – 16:30** ***Drive to the ancient city of Helike***
- 16:30 – 18:00** **Visit of the ancient city of Helike**
Dora Katsonopoulou, The Helike Society, Greece

Departures from Aigion to Athens or back to Nafpaktos

End of the CRL School 2022