

# Corinth Rift Laboratory School – 2022

(Patras-Nafpaktos September 23-27, 2022)

## *Programme*

### 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?**  
Pierre Briole, CNRS, Paris, France
- 14:00 – 14:30**      **Geodynamic setting, large earthquakes and the growth of faults in the western rift 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, Aristotle University of Thessaloniki, Greece  
Vasileios Karakostas, Aristotle University of Thessaloniki, Greece
- 16:00 – 16:30**      **Large Earthquakes and Focal Mechanisms in the Gulf of Corinth**  
George Kaviris, National and Kapodistrian University of 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**      **Age, origin and history of the rocks that can be found along the north coast of the Corinth Rift, preparation in the classroom of the geological field trip of Sunday morning**  
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 messages**

09:15 – 09:45      **Tectonics, structural setting and tectono-sedimentary processes in the Corinth Rift**  
Haralambos Kranis, National and Kapodistrian University of Athens, Greece

09:45 – 10:15      **Use of CRL Data for Detailed Seismological Studies**  
Anna Serpetsidaki, University of Patras, Greece

10:15 – 10:45      **Historical elements for sciences and observatories**  
Fiori-Anastasia Metallinou, National Observatory of Athens, Greece

10:45 – 11:15      **Break**

11:15 – 13:15      **Hand-on GNSS instruments – learn how to manipulate a GNSS instrument**  
Panagiotis Elias, National Observatory of Athens, Greece  
Pierre Briole, CNRS, Paris, France

13:15 – 14:45      **Lunch Break**

14:45 – 15:45      **Hand on simple seismic software package provided in the CRL portal**  
George Kaviris, National and Kapodistrian University of Athens, Greece  
Ioannis Spingos, National and Kapodistrian University of Athens, Greece

15:45 – 17:15      **Presentations by the students**  
3mn per student + questions

17:15 – 21:30      **Free time**

21:30 – 23:00      **Sky gazing (in an area close the hotel Akti that will be will be announced shortly before)**  
Fiori-Anastasia Metallinou, National Observatory of Athens, Greece  
With the participation of the Association of amateur astronomers ‘Orion’, Patra, Greece

## 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**  
Athanasios Ganas, National Observatory of Athens, Greece  
Christian Beck, Université de Savoie, France

### Arrival at Akti hotel

**13:30 – 15:00**      **Lunch Break**

### Afternoon: Nafpaktos

**15:00 – 15:40**      **Earthquakes in the classroom – Part 1**  
Francesca Cifelli, Roma TRE University, Rome, Italy  
Fotis Danaskos, 8th Junior - Senior High School in Chalandri, Greece

**15:40 – 16:10**      **Tuned in to the Earth: Using data online at school**  
Jean-Luc Berenguer, University Côte d'Azur / EGU, France

**16:10 – 16:40**      **Break**

**16:40 – 17:10**      **The earthquake suitcase**  
Vasiliki Kouskouna, National and Kapodistrian University of Athens, Greece

**17:10 – 17:40**      **Diffusion of Models and Teaching Tools (SEISMOBOX etc) in Hellenic schools**  
Fotis Danaskos, 8th Junior - Senior High School in Chalandri, Greece

**17:40 – 18:10**      **Incorporating the seismobox into school teaching**  
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 the 1<sup>st</sup> High School of Nafpaktos**

#### *University Students*

**09:00 – 09:30**      **Physical mechanisms behind seismic site response - Some examples from Aegion**

Olga Ktenidou, National Observatory of Athens, Greece

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

Vasilios Sakkas, National and Kapodistrian University of Athens, Greece

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

Panagiotis Elias, National Observatory of Athens, Greece

**10:30 – 11:00**      **Break**

**11:00 – 11:30**      **Static and dynamic gravity investigations within Corinth Rift Laboratory project**

Jan Mrlina, Institute of Geophysics, Czech Academy of Science, (IGCAS) Prague

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

George Tsoflias, The University of Kansas, USA

**12:00 – 12:30**      **Quantification of N. Peloponnese shoreline displacement using very high spatial resolution remote sensing data**

Emmanouel Vasilakis, National and Kapodistrian University of Athens, Greece

**12:30 – 14:30**      **Break**

**14:30 – 15:00**      **Platform-based Technology and Earth Observation Services in Response to Geohazards**

Michael Foumelis, Aristotle University of Thessaloniki, Greece

**15:00 – 15:30**      **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

**15:30 – 16:00**      **The European Space Education Resource Office (ESERO)**

Antonios Mouratidis, Aristotle University of Thessaloniki, Greece

**16:00 – 17:30**      **Hands-on Geohazard Exploitation Platform**  
Michael Foumelis, Aristotle University of Thessaloniki, Greece

## **Tuesday September 27, 2022**

**08:30 Departure from Akti Hotel**

### **Laboratory of Seismology, University of Patras**

**09:30 – 10:00**      **Climate and Earthquakes: Recent Research and Potential Contribution of Near Fault Observatories**  
Zafireia Roumelioti, University of Patras, Greece

**10:00 – 10:30**      **Relative Sea level changes in the Corinth Gulf during the late Holocene**  
Niki Evelpidou, National and Kapodistrian University of Athens, Greece  
Anna Karkani, National and Kapodistrian University of Athens, Greece

**10:30 – 11:00**      **Structural morphology and geometric control of the Rio-Antorio 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**

