

















# CRL School 2024

Corinth Rift Observatory



Patras-Nafpaktos, Greece **6-10 September 2024** 

# (Patras-Nafpaktos September 6-10, 2024)

# Programme

# Friday September 6, 2024

#### **Department of Physics, University of Patras**

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13:00 – 13:30	Welcome to the CRL School 2024	
13:30 – 14:00	Why CRL? Pierre Briole, École normale supérieure / CNRS, 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 Athanassios 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, École normale supérieure / CNRS, Paris, France	
15:00 – 15:30 Break	<b>Σ</b>	
15:30 – 16:00	Seismic Parameters and Microseismicity in the Gulf of Corinth Thimio Sokos, Universioty of Patras, 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	Opposing development practices within the Delphic landscape Christos Merantzas, University of Patras, Greece	
17:00 – 17:30	Off-shore faults imaging and monitoring in the Corinth Rift Maria Geraga, University of Patras, Greece	
17:30 Departure to Nafpaktos (Akti Hotel)		

### Saturday September 7, 2024

#### 08:30 Departure from Akti Hotel

08:45 - 09:00	Welcome messages	
09:00 - 09:30	Tectonics, structural setting and tectono-sedimentary processes in the Corinth Rift Haralambos Kranis, National and Kapodistrian University of Athens, Greece	
09:30- 10:00	Use of CRL Data for Detailed Seismological Studies Anna Serpetsidaki, University of Patras, Greece	
10:00 – 10:30	<b>Historical elements for sciences and observatories</b> Fiori-Anastasia Metallinou, National Observatory of Athens, Greece	
10:30 – 10:40	Introduction to geological (outcrop) field trip of Sunday Athanassios Ganas, National Observatory of Athens, Greece	
10:40 – 11:10 Break		
11:10 – 13:00	Hands on GNSS measuring Panagiotis Elias, National Observatory of Athens, Greece George Polykretis, TREE Company, Athens, Greece Pierre Briole, École normale supérieure / CNRS, Paris, France	
13:00 – 15:00 Lunch Break		
15:10 – 15:30 Transport to hands-on lab		
15:30 – 16:30	Hands 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	
16:30 – 17:30	Presentations by the students 3mn per student + questions	
17:30 – 21:30 Free time		

21:30 – 23:00 Sky gazing (in an area close the hotel Akti that will be announced shortly before)
Fiori-Anastasia Metallinou, National Observatory of Athens, Greece
Drivas argyris, 3rd Junior High School of Nafpaktos, Astronomy Group of Nafpaktos,
Greece

# Sunday September 8, 2024

#### 08:30 Departure from Akti Hotel

08:30-13:30 Field trip at Psaromita (GNSS and seismic station), geologic stops

along the journey

Athanassios Ganas, National Observatory of Athens, Greece

Arrival at Akti hotel

13:30 - 15:00 Lunch Break

**TBD** 

16:10 - 16:40 Break

**TBD** 

# Monday September 9, 2024

#### **School Teachers**

### 10:00 Departure from Akti Hotel to 3rd Junior High School in Nafpaktos

10:30 – 11:30	Teaching Earthquakes in classroom using stem tools	
	Fotis Danaskos, 8th Junior High School in Chalandri, Greece	
11:30 – 12:10	Teaching Earthquakes in classroom using open data, case study: active fault	
	bases	
	Kiki Makri, 2nd Modern Junior High Schools of Athens/National Observatory of	
	Athens	
12:10 – 12:40	CRL School's educational team	
	Experimental activities, Pedagogical activities, Online activities	
<b>University Students</b>		
09:00 - 09:30	Introduction to GNSS	
	Anonio Avallone, Istituto Nazionale di Geofisica e Vulcanologia, Italy	
09:30 - 10:00	Quantification of N. Peloponnese shoreline displacement using very high	
	spatial resolution remote sensing data	
	Emmanouel Vassilakis, 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	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	
11:00 - 11:30 Break	•	
11:30 - 12:00	Static and dynamic gravity investigations within Corinth Rift Laboratory	
	project	
	Jan Mrlina, Institute of Geophysics, Czech Academy of Science, (IGCAS)	
	Prague	
12:00 - 12:30	Open Seismic Data Retrieval through EIDA Nodes and Automated Moment	
	Tensor Analysis	
	Christos Evangelidis, National Observatory of Athens, Greece	
12:30 – 13:00	Seismic hazard in Greece with a focus in the Western Gulf of Corinth	
	Angelos Zymvragakis, National and Kapodistrian University of Athens, Greece	
13:00 – 13:30	Physical mechanisms behind seismic site response - Some examples from Aegion	
	Olga Ktenidou, National Observatory of Athens, Greece	
13:30 – 14:30 Lunch Break		
14:30 - 16:00	ESA TBD	
16:00 – 16:20 Transport to hands-on lab		
16:20 - 18:00	Follow-up Hands on GNSS measuring	
	Pierre Briole, École normale supérieure / CNRS, Paris, France	
	Panagiotis Elias, National Observatory of Athens, Greece	

#### Tuesday September 10, 2024

#### 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-Antirrio bridge

Akis Panagis, GEFYRA S.A., Greece

#### 11:00 – 11:30 Move from Seismology Laboratory to Department of Geology

11:30 – 12:00 Recent sedimentary processes in the Gulf of Corinth. Seismic and aseismic

turbidites

Spyros Sergiou, University of Patras, Greece

12:00 – 12:50 (parallel groups of ~10) Laboratory class for coring study

Spyros Sergiou, University of Patras, Greece

(parallel groups of ~10) Laboratory class: Study of archaeomaterials in

"<u>KERAMos Lab</u>"

Ioannis Iliopoulos, University of Patras, Greece Vaia Xantopoulou, University of Patras, Greece

#### 12:50 – 14:00 Lunch at the cafeteria near the department of Physics

#### 14:00 – 15:00 Drive to the Helike Fault

15:00 – 16:30 Educational field activities for Helike fault

CRL School's educational team: Kiki Makri, Fotis Danaskos & Olympia Tripolitsiotiou

16:30 – 17:30 Field trip to the Helike fault

Emmanouel Vassilakis, National and Kapodistrian University of Athens, Greece

# End of the CRL School 2024 - School Bus to the city of Aigion and to Nafpaktos

See the timetable for buses from Aigio to Athens

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