



**Call for students and teachers to participate
to the Corinth Rift Laboratory School 2023**

CRL School 2023

Corinth Rift Observatory



Patras-Nafpaktos, Greece

22-26 September 2023

Dear Student and Teacher,

The Corinthian Gulf region is one of the most active rifts worldwide, with extensional deformation rates of up to 15 millimeters per year, observed between its north and south coasts. This phenomenon is unique in Europe and in areas beyond tectonic boundaries. Additionally, the coastal areas of southern Fokida in the northern portion of the Gulf subside, while the coastal areas of northern Achaia in the southern part are uplift. Throughout history, strong and destructive earthquakes have occurred in the area, with the most recent one being the Aegion earthquake in 1995.

For over 30 years, there has been a collective effort to comprehend the geophysical phenomena in the area, including earthquakes, landslides, and tsunamis. The numerous and extensive studies conducted by research teams from across Europe reflect the importance of this pursuit. To facilitate these studies, a plethora of instruments, such as seismometers, accelerometers, and geodetic GNSS receivers, have been installed and equipped with telemetry to enable their full operation. Seismological and GNSS geodetic stations are being utilized to record ground motion and measure ground deformation, respectively, to better understand the geo-tectonic background of the region. Frequent acquisitions of data from Earth observation satellites are also being obtained to supplement these terrestrial observations. These diverse observations from both terrestrial and satellite sources are utilized in scientific studies across numerous fields.

Corinth Rift Laboratory (CRL) is a common site of research activities in the area. Its Greek members are the National and Kapodistrian University of Athens, the National Observatory of Athens, the University of Patras and the Harokopio University of Athens. From the French side, the École Normale Supérieure Universities of Paris, Nice, Strasbourg, Savoie Mont Blanc and the Institut de Physique du Globe de Paris. The University of Prague is also a member. The Gulf of Corinth has been included within the framework of the pan-European observation infrastructure of the Eurasian Tectonic Plate (EPOS program) as a Near Fault Observatory.

Are you passionate about geophysics, seismology and geology and eager to expand your knowledge? Then you won't want to miss the opportunity to attend the **upcoming CRL School 2023 in Nafpaktos-Patras, Greece, from September 22 to 26**. After a successful live event in 2022, we are excited to continue the streak and bring back the in-person experience. With the chance to learn from esteemed members of the Corinth Rift Laboratory, including professors from universities across Europe, you'll gain valuable insights into earthquakes, landslides, and tsunamis. Don't miss out on this chance to enhance your expertise and network with other colleagues. **Join us at CRL School 2023!** The aims of CRL School are:

- Students with different backgrounds from different universities, to get acquainted with the research and related activities carried out in the scientific fields of Seismology, Geophysics and Geology, especially for the natural laboratory of the Gulf of Corinth.
- To bring the research/university community together with secondary school teachers to enrich their knowledge in the thematic fields aiming to more efficient and targeted training.
- To disseminate popular knowledge about the thematic areas in local society and local authorities.
- To intensify the osmosis and collaborations among researchers/professors from different scientific fields on the thematic objectives of the Gulf of Corinth Observatory.

School activities are:

- Introduction to the science of seismology and seismicity in the Gulf of Corinth with presentations of researchers/professors as well as students and teachers of secondary education.
- Instrumental measurement of seismicity and visits to seismological stations in the area.
- Measurement of ground deformation by geodetic GNSS, field work and visiting GNSS stations of the area.
- Measurement of ground deformation by satellite microwave RADAR (SAR interferometry, SENTINEL mission, GEP-TEP and its application to the CRL), with presentations also in the laboratory.
- Geological observations (geotectonic, geomorphology, coastal and marine geology) on- and off-shore, decoding the knowledge that they provide us.
- Seismic Hazards and Impact on Engineering Geology, the case of Rio-Antirrio Bridge.

Among others, demonstrations of a seismograph operation for secondary education students, demonstration of scientific instruments, educational on- and off-shore activities as well as presentations/lectures by distinguished national and foreign scientists will be carried out to the participating students and teachers as well as to the general public.

The summer school is **mainly addressed to postgraduate and doctoral students**. This year's school will select **10 students minimum** from Greek and foreign universities as well as **8 teachers minimum** of secondary education. The school is free of charge for all participants, with the subsidy of students and secondary school teachers supported by the European Geosciences Union (EGU). The subsidy for the students and teachers **covers more or less the cost of accommodation and meals**.

Information about the CRL, as well as the complete program and material for the past summer schools can be found at the link:

<http://crlab.eu>

For further information, you can also contact CRL School team by e-mail:

crl.school.edu@gmail.com

Applications can be sent until 10th May

The decision for the final participants will be announced during the first week of June 2023.

Interested **students** can sign up using the following link:

[Student Application Form](#)

Interested **teachers** can sign up using the following link:

[Teacher Application Form](#)