



**Call for students and teachers to participate  
to the Corinth Rift Laboratory school 2022**

# **CRL School 2022**

**Corinth Rift Observatory**



**Patras-Nafpaktos, Greece**

**23-27 September 2022**

Dear Student and Teacher,

The broader region of Corinthian Gulf belongs to the most active rifts worldwide. Owing to that, extensional deformation rates of up to 15 millimeters per year are observed, between the North and South coast of the Corinthian Gulf, which is unique in Europe and for areas beyond tectonic boundaries in general. Moreover, a northern portion of the Corinthian Gulf land (coastal areas of southern Fokida) is subsiding and the southern part (coastal areas of northern Achaia) is uplifted. Considering the seismicity, strong and destructive earthquakes have been recorded since antiquity, with the most recent one being the Aegion in 1995.

A concerted effort is taking place for more than 30 years in order to understand the geophysical processes, i.e., earthquakes, landslides and tsunamis, for the area. The latter justifies the plethora of studies occurred by research teams from all over Europe. To enhance those studies, a large number of instruments, i.e., seismometers, accelerometers, geodetic GPS receivers, etc., have been installed, equipped with telemetry and are fully operating. Seismological stations that record ground motion and GPS geodetic stations that measure ground deformation are being exploited for a better understanding of the geo-tectonic background of the area. In order to achieve that, data from Earth observation satellites with frequent acquisitions are being obtained. Both terrestrial and satellite observations are exploited in research projects and studies of many scientific fields.

Corinth Rift Laboratory (CRL) is a common site of research activities in the area. Its members are from Greece, 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 Corinthian Gulf has been included within the framework of the pan-European observation infrastructure of the Eurasian Tectonic Plate (EPOS program) as a Near Fault Observatory.

In 2016, the first CRL School was held. The last two Schools (2020 and 2021) were virtually held, due to COVID-19 restrictions, stopping the 4-year streak of live CRL Schools. This year, we are very pleased to inform you that the **CRL School 2022 will be held live in Nafpaktos, Greece between September 23 and 27.**

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 Corinthian Gulf.
- 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 Corinthian Gulf 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 GPS, field work and visiting GPS 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 (SEISMO-BOX), 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**.

The programme of the CRL School 2020 officially has been recognised by the Ministry of Education and Religious Affairs of Greece, General Directorate of Studies of Primary and Secondary Education, for the academic year 2021-2022 (Φ1/ΝΔ/8978/38161/Δ7).

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](mailto:CRL_School_edu@gmail.com)

Applications are accepted **from May 2<sup>nd</sup> to 13<sup>th</sup>, 2022**.

**Students** can express their interest by signing up using the following link:

[Student Application Form](#)

**Secondary education teachers** can express their interest by signing up using the following link:

[Teacher Application Form](#)

Visit the [CRL School 2022 portal](#) for updated information.

<b>CRL School 2022 (Live/experiential)</b>	
<b>Summary</b>	
Area	Nafpaktos, Greece
Application	2-13 May 2022
Date	23-27 September 2022
Students	Minimum 10
Teachers	Minimum 8
Costs	Accommodation and meals are covered

The CRL scientific committee