

Announcement and invitation to RD50 to join

4th EPS Technology and Innovation Group's (TIG) Maker Event for Science, Technology and Interfaces in Montenegro

Date: not yet fixed but somewhere between 15th June and 15th July 2022

Place: Budva, on the seacoast

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EPS-TIG MB Group

EPS-TIG (Technology and Innovation Group), in close collaboration with the EPS Young Minds Programme is organising a hands-on Maker Event for Science, Technology and Interfaces in Montenegro somewhere between 15th June and 15th July 2022.

The purpose of the event is to offer young physicists and engineers from Western Balkan but also mixed with Young Minds from Western EU, hands-on skills in hardware, software and related interfaces. This was in response to an identified need among physics and engineering students to develop various skills which are difficult to obtain during their studies, but also to accelerate Integration of Western Balkan into EU R&D.

The 1st EPS-TIG Hands-on-event addressed this need, employing "hands-on" methods using available devices. "Really available" meant devices that are modern, compact and affordable for a standard laboratory. Examples include Raspberry Pi as a standard platform, easy-to use FPGA software, fast semiconductor-based Avalanche Photodiodes, a camera containing FPGA for ultraprecise timestamping.

25 students or (early) post-doc level researchers from Western EU joined the 1st event organized by Marcus Nordberg. According to the feedback, on average, 80% of the attendees found the exercises useful in the first EPS-TIG event. This encouraged TIG-EPS to organise a second workshop in 2020 but this was postponed due to COVID-19, and it is now scheduled to be in November 2021 at CERN. **The third EPS-TIG is planned to be in Montenegro.**

The idea is to have between 25 and 30 students attending, mainly from the Balkan countries but a mixing with students from western Europe (Young Minds) would be welcome. Contact should be taken with Radu Constantinescu (Craiova, RO), chair of the EPS Committee of European Integration (CEI).

The program for the 3th EPS-TIG is still opened but 3 experiments in 3 different fields could be planned: e.g., health care, laser table experiment, 3D imaging, etc.

EPS-TIG group and University of Montenegro is inviting RD50 to join event and with technical expertise to help us to design the experiments and to be successful! Possible financial support is also welcomed!

Bring to us your ideas, equipment and stuff 😊

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Thank you for your support, ETPS-TIG MB Team

An example

2nd EPS: 26-28 November 2021

CERN

<https://indico.cern.ch/event/915186/>

This Hands-on-event aims to target this situation.

Work on interfacing employing “hands-on” = really available devices. “Really available” means that the devices are modern, compact and affordable also for a standard laboratory. Instrumental building blocks could be for example:

- Raspberry Pi as standard platform.
- Comprehensive and easy-to use FPGA software.
- Detectors, e.g. a fast, semiconductor-based Avalanche Photodiode. These detectors employ plasmons and are used for technologies like LIDAR in industry.
- A camera: e.g. A BASLER B/W camera, which already contains an FPGA, permitting for ultraprecise timestamping. These cameras are often used in laboratories and are affordable.