

[H2020-ARIEL] HiSPANoS Hands-On school on the production, detection and use of neutron beams

21-30 September, 2022 @Seville, Spain

INTERNATIONAL ADVISORY COMMITTEE

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LOCAL ORGANIZING COMMITTEE

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The school, organized by the Universidad de Sevilla in the framework of the [H2020 ARIEL project](#), aims at covering the experimental aspects related to the production, detection and use of neutron beams. To this purpose, the core of the school is a series of experiments that will be carried out (**September, 26th to 30th**) at the [HiSPANoS facility](#) at the Centro Nacional de Aceleradores (CNA) in Seville, Spain.

The experiments will be complemented with lectures (Interaction of neutrons with matter, production of neutron beams and detection of neutrons) and seminars (The role of neutrons in astrophysics, nuclear technology, medicine and related experiments) that will be given online during two days (**September, 21st and 22nd**) in the week prior to the on-site experiments. The target audience comprises young researchers, which can be Master or PhD students as well young postdocs.

EXPERIMENTS:

- Introduction to detectors, acquisition systems and data analysis.
- Time-of-flight experiments using fast pulsed neutron beams and detectors providing pulse shape discrimination.
- Neutron capture MACS measurements by activation using an epithermal neutron beam.
- Neutron radiography with thermal neutrons via full moderation of an initially fast neutron beam.
- Study of the neutron distribution from fission with the miniBELEN detector.

POSTERS & BEST POSTER PRIZE

The participants willing to present a poster must submit an abstract in addition to their registration. The lecturers and the local organizing committee will award the "Best Poster Prize", which consists of a diploma and a check of 300€.

REGISTRATION

Please register before June 15th 2022. [EXTENDED UNTIL JUNE 24TH](#).

SPONSORED BY H2020-ARIEL

The registration fee, travel and accommodation costs in double rooms will be fully covered by the H2020 ARIEL Project

REGISTRATION AND MORE INFORMATION: <https://indico.cern.ch/e/ARIELschool>