# Hispanos Hands-On school on the production, detection and use of neutron beams

#### **LECTURERS**

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## 25-29 May, 2020 @Seville, Spain

The school, organized by the Universidad de Sevilla in the framework of the <u>H2020 ARIEL project</u>, 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 at the <u>HiSPANOS facility</u> at the Centro Nacional de Aceleradores (CNA) in Seville, Spain.

The experiments will be complemented with lectures covering the production and detection of neutrons, nuclear data needs, physics research at large neutron beam facilities and with large neutron detectors, applications using neutron beams, and a seminar on the career development in the neutron and nuclear data community. The target audience comprises young researchers, which can be Master or PhD students as well young postdocs.

#### **EXPERIMENTS**

- Time-of-flight experiments using fast pulsed neutron beams and detectors providing pulse shape discrimination.
- MACS measurements by activation using an epithermal neutron beam.
- Neutron radiography with thermal neutrons via full moderation of an initially fast neutron beam.
- Characterization of the neutron distribution from fission with a neutron detector array.

#### POSTERS & BEST POSTER PRIZI

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€.

#### **SPONSORED BY H2020-ARIE**

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

REGISTRATION AND MORE INFORMATION: https://indico.cern.ch/event/865322/

## LOCAL ORGANIZING COMMITTEE

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Accelerator and Research reactor Infrastructures for Education and Learning



