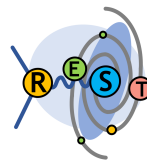# REST-for-Physics Training School

Rare Event Searches Toolkit
software

The REST-for-Physics (Rare Event Searches Toolkit) Framework is a collaborative software effort that provides common tools for acquisition, simulation, and data analysis of gaseous Time Projection Chambers (TPCs). REST-for-Physics was conceived at the University of Zaragoza and it is intensively used in academia by undergraduate, master and PhDs students for thesis preparation. It is also used for generic R&D, and it has been adopted by experiments like IAXO, TREX-DM or PandaX-III to assist on the data processing and storage of official experimental data.

This school edition @ DESY will provide a general overview of the different capabilities of the framework through interactive sessions. During the course we will go through basic examples that will allow us to reproduce some of the common tasks performed during data processing, storage and analysis.

In order to be able to follow the course efficiently, participants are required to have a basic knowledge of programming languages, such as python or C, certain programming experience (having written your own pieces of code) is also highly recommended. REST-for-Physics is written in C++, and therefore having previous knowledge of the basic concepts of C++ is mandatory.

If you have previous coding experience in C or python, it will suffice to study the main C++ concepts at the following NIST C++ course for scientists.

REST-for-Physics uses ROOT and Geant4 packages. Previous knowledge of those packages is an advantage to take maximum profit from this course.

HELMHOLTZ

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CAPA

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DESY, Hamburg, Flash seminar room (building 28c, 2nd floor).

16th - 17th March, 2023.

Sessions: morning (08:30am - 01:00pm), afternoon (02:30pm - 07:00pm).

Limited number of places available.

Free online registration: QR code or https://indico.desy.de/event/37106/

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