



PITHIA-NRF First Training School

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PITHIA-NRF Research Infrastructure Introductory Talk

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PITHIA Network of Research Facilities (PITHIA-NRF) aims at building a European distributed network integrating observing facilities, data collections, data processing tools and prediction models dedicated to the ionosphere, thermosphere and plasmasphere (ITP) research. The PITHIA-NRF project has received funding from the European Commission H2020 Research Infrastructures Programme.

PITHIA-NRF Research Nodes operate in 10 European countries and offer Trans National Access to users from all over the world for the implementation of projects relevant to observation and modeling of ionospheric plasma processes, its perturbations and irregularities, its coupling with the neutral atmosphere and its interaction with the plasmasphere. The PITHIA-NRF nodes provide access to data from ground-based instruments such as GNSS ground based receivers, Ionosondes, Digisondes, Dynasondes, Doppler Sounders, Incoherent Scatter Radars, Riometers, All Sky Imagers, and the LOFAR radio telescope.

Users can also access long-term observational data and relevant scientific models through the PITHIA-NRF e-Science Center, a dedicated knowledge hub that provides open access to Findable Accessible Interoperable Reusable (FAIR) data and higher-level data-products.

The first PITHIA-NRF Training School is addressed to scientists and engineers who want to learn and exploit the PITHIA-NRF functionalities for their own developments. The school courses include introductory talks on ionospheric plasma dynamics, on ionospheric-magnetosphere coupling, on the Earth's plasmasphere formation and dynamics, on the neutral upper atmosphere physical processes and on the coupling of the upper atmosphere with the lower atmosphere. The second part includes PITHIA specific lectures that provide information about the data and models accessible through the e-Science Center. The last part of the Training School is dedicated to Working Groups activities that offer experimentation possibilities to the attendees.



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