One of the most prestigious physics conferences worldwide, the European Physical Society (EPS) conference on High Energy Physics (HEP), is coming back to Italy after over thirty years. The EPS HEP 2017 edition is organised by the Italian Institute for Nuclear Physics (INFN) Padua Division and by the University of Padua Department of Physics and Astronomy "Galileo Galilei". It will take place at Lido island in Venice, which will hence become the gathering point for the international top physicists.

The conference will deal with some of the most fascinating themes in physics research: from the origin of our Universe to the Higgs Boson identikit, from the hunt for dark matter to the properties of the elusive neutrino, from New Physics to gravitational waves whose historic discovery was announced in 2016. All of these topics and many more will be discussed during the conference, where many cutting edge results and updates will be presented. The scientific subjects will be organized in thirteen topics: astroparticle physics, cosmology, dark energy and gravitational waves, dark matter, neutrino physics, heavy ion physics, flavour physics and fundamental symmetries, Higgs and new physics, QCD and hadronic physics, detector R&D and data handling, accelerators for HEP, quantum field and string theory, outreach, education and diversity. The subjects will be proposed during 900 presentations, including plenary and parallel talks, and scientific posters session. A thousand researchers are coming to Venice from about fifty countries in all continents. More than 400 scientific institutions worldwide will be represented.

During the conference, the ceremony of the prestigious 2017 awards of the High Energy and Particle Physics Division of EPS will be held: High Energy and Particle Physics Prize, Giuseppe and Vanna Cocconi Prize, Young Experimental Physicist Prize, Gribov Medal, Outreach Prize and one Special Prize.

EPS-HEP 2017 will not only be about meaningful scientific results: it also offers a rich cultural program involving high school students and the general public: exhibitions, science shows and concerts.
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The EPS-HEP Conference 2017 has also been rewarded with the prestigious acknowledgment of the Medal of the President of the Italian Republic.