

## **NEWSLETTER 83**

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## **AWARDS**

## **BOREXINO WINS THE PRESTIGIOUS 2021 COCCONI PRIZE**

The EPS European Physical Society has awarded the prestigious 2021 Giuseppe and Vanna Cocconi Prize to the Borexino Scientific Collaboration. The important international prize, established

in 2011 and awarded every two years for outstanding contributions to astroparticle physics and cosmology, has gone to the Borexino experiment at the INFN Gran Sasso National Laboratories "for their ground-breaking observation of solar neutrinos from the pp chain and CNO cycle that provided unique and comprehensive tests of the Sun as a nuclear fusion engine", as stated in the EPS motivation.

The award confirms the Borexino Collaboration's great success in its intensive scientific and technological development activities which have spanned over more than three decades. Immersed in the cosmic silence of the Gran Sasso underground laboratories, since the beginning of its data production on 15 May 2007, Borexino has demonstrated such a high level of radiopurity that it is unprecedented in its field of research. It is thanks to this characteristic, achieved through the development of innovative methods for radio-purification, as well as the long and careful work of selecting and developing all its components during the construction phase, that Borexino - an intense collaboration between Italy, Germany, France, Poland, the United States and Russia - has been able to achieve the results highlighted in the motivation for the Cocconi prize: the first spectroscopic observation, in real time and in the same experimental setup, of solar neutrinos from the proton-proton fusion chain, and the first detection of neutrinos from the CNO fusion cycle.