

# Press Release 2021

## HOW THE SUN WORKS EXPLAINED BY GALLEX AND BOREXINO



If it weren't for them, we wouldn't know the Sun like we do today: it's thanks to [Gallex](#) and [Borexino](#), the experiments for detecting solar neutrinos that have operated in the underground experimental rooms of the INFN Gran Sasso National Laboratory, that we know how to explain how our star functions. The first observation and experimental proof of the processes that power the Sun, which allow it to shine, light, and heat the Earth (making it the ideal environment for

life), are owing to their unique measurements. To celebrate the discoveries of Gallex and Borexino, and the essential contribution made to physics by the scientists who devised and led them, the international symposium "Solar Neutrino Physics at LNGS" was held on 12 September, at the Accademia Nazionale dei Lincei in Rome.

The following scientists spoke at the event: Giorgio Parisi, Nobel Prize Laureate in Physics and vice-president of the Accademia Nazionale dei Lincei; Gianpaolo Bellini, professor emeritus at the University of Milan and researcher emeritus at INFN, founder and, for many years, coordinator of the Borexino project; Till Kirsten, scientist at the Max Planck Institute and founder of the Gallex project; Luciano Maiani, member of the Accademia Nazionale dei Lincei, professor emeritus at the Sapienza University of Rome and researcher emeritus at INFN, of which he was president those years when the Borexino project was founded; Alexei Smimov, physicist at the Max Planck Institute and at the International Center for Theoretical Physics of Trieste; Wick Haxton, professor at California University; and Lucia Votano, researcher emeritus of INFN and former director of the INFN Gran Sasso National Laboratories. The works were coordinated by Marco Pallavicini, vice-president of INFN and co-spokesperson of Borexino, and Ezio Previtali, director of the INFN Gran Sasso National Laboratories.