



CERN Colloquium

SPEAKER: Juan Jose Gomez Cadenas (IFIC (CSIC-U. Valencia) ES))

TITLE: **Ettore Majorana through the looking glass**

DATE: Thu 17/01/2013 16:30

PLACE: Council Chamber

ABSTRACT

Ettore Majorana was one of the greatest scientists of the 20th century and also one of the most tragic figures. In 1938 he disappeared at the sea. His body was never found. Before vanishing he had postulated that the neutrino, the mysterious particle invented by Wolfgang Pauli and christened by Enrico Fermi a few years before, was its own antiparticle. Majorana's great insight can be tested experimentally. If the neutrino is its own antiparticle neutrinoless double beta decay processes can occur. Those exotic decays, whose lifetime is many orders of magnitude longer than the age of the universe may hold the key to the question of the nature of the neutrino, and by extension help us to understand the cosmic asymmetry between matter and antimatter.