



IFMIF-DONES: a key milestone in the long path to Nuclear Fusion

Nuclear Fusion has been one of the golden dreams of Mankind for ages. However, the successful control and profit from the energy produced in Nuclear Fusion reactions is still far away to be a reality. There are several reasons for this delay with respect to Nuclear Fission, a process that has been controlled for many years and powers our houses, factories and installations everyday. Among the main difficulties to profit from Nuclear Fusion, we find the control of plasmas at temperatures above 100M°C, and protecting the installation from the exceeding neutrons. In this complex framework, the International Fusion Materials Irradiation Facility (IFMIF) - DEMO-Oriented Neutron Source (DONES), to be installed in Granada (Spain), is the largest project of the Scientific Community to test the materials that can accurately stop these neutrons without damaging fusion reactors, and a real hope to definitively control Fusion and produce high amounts of cleaner energy.



Short biography of Antonio Manuel Peña-García

Dr. Antonio Peña-García (Granada, Spain, 1977) holds a Ph.D. and Master in Physics by the University of Granada, where he is Associate Professor of Lighting Technology at the Department of Civil Engineering, and Director of the Research Group “Lighting Technology for Safety and Sustainability”, which he founded in 2012. Before joining the University, he was Responsible for Regulation & Homologation in the Lighting System Branch of Valeo Group in Spain. He has published more than 80 contributions in high ranked journals and international congresses, directed several doctoral theses and been IP of more than 10 projects with Public Administrations and private companies, always in the field of Sustainable Lighting. Beyond his University, Antonio Peña has been visiting professor in the “Sapienza” University of Rome (Italy) during three months. In November 2017 he was appointed as Director of the Office for the Implementation of IFMIF-DONES (OFID), one of the great milestones in the way to Nuclear Fusion.