

Augusto Pereira is a researcher and engineer at the National Fusion Laboratory of CIEMAT, Spain, with over 23 years of experience in R&D activities related to nuclear fusion and more than 8 years of university teaching experience. He holds a Ph.D. in Engineering from UNED University, a Master's Degree in Computing Research from the Complutense University of Madrid, and degrees in Mechanical Engineering and Computer Science.

His career has focused on the application of machine learning, feature selection, pattern recognition, reinforcement learning, and advanced data analysis to large datasets generated by nuclear fusion devices such as tokamaks and stellarators. He has also carried out mechanical and electrical engineering tasks, systems integration, and technical coordination in major international facilities including JET, DIII-D, NSTX, ITER, and the ESRF Synchrotron.

He currently combines his research activity at CIEMAT with his role as Assistant Professor of Mechanical Engineering at the University of Alcalá, where he also contributes to academic management, student supervision, and doctoral research support.

His current work focuses on radiation effects on materials for next-generation tokamaks, material characterization under extreme nuclear environments, and the use of machine learning for decision-making in materials science. He has coordinated international R&D projects within the European Fusion Technology Programme, contributing to team coordination, project management, systems integration, and quality assurance for technical and engineering projects, including activities relevant to ITER's WAVS diagnostic system.