

Comité Asesor UNIA

Mar Capeáns Garrido

Científica Senior en el CERN (Ginebra, Suiza)

Nacida en Santiago de Compostela en 1967, Mar Capeáns es doctora en Física por la Universidad de Santiago de Compostela, y posee un MBA en Gestión de proyectos tecnológicos por la École Polytechnique Fédérale y Universidad de Lausanne (Suiza).

Se incorporó al CERN en 1992 para realizar su Máster y Doctorado en el grupo de desarrollo de detectores de Georges Charpak, premio Nobel de Física ese mismo año. En 1998 se une al laboratorio Deutsches Elektronen-Synchrotron (DESY) en Alemania y participa en el diseño, la construcción y puesta a punto del detector del experimento HERA-B. En el año 2000 regresa al CERN y en 2001 se incorpora como miembro del personal científico del CERN al experimento ATLAS del LHC.

Experta en el diseño y construcción de detectores de partículas y la gestión de grandes proyectos tecnológicos, lidera el grupo de Tecnología de Detectores del CERN desde 2012 hasta 2017.

Entre 2017 y 2019 la Dra. Capeáns lidera el grupo de gestión de proyectos del Departamento de Tecnología del CERN, y en 2019 asume la coordinación técnica para las mejoras del experimento CMS del LHC.

Ha participado en la propuesta y dirección de proyectos tecnológicos cofinanciados por la Comunidad Europea y coordinados por el CERN, ha publicado más de 500 artículos científicos en el campo de la Física de Altas Energías y la instrumentación, es editora de la revista Journal of Instrumentation (JINST), y sirve como asesora en Consejos Científicos y en la evaluación de financiación competitiva de programas de Física de partículas internacionalmente, y para programas de la Comisión Europea.

Senior Scientist at CERN (Geneva, Switzerland)

Born in Santiago de Compostela in 1967, Mar Capeáns holds a PhD in Particle Physics from the University of Santiago de Compostela, and an MBA in Management of Technology from the École Polytechnique Fédérale and the University of Lausanne (Switzerland).



She joined CERN in 1992 for her master and doctoral thesis projects, becoming part of the Detector Development Group of Georges Charpak, Nobel Prize winner in Physics the same year. After six years working on R&D projects to find the appropriate detection technologies for the Large Hadron Collider (LHC) experiments, she moved to the German laboratory Deutsches Elektronen-Synchrotron (DESY) in 1998. There she participated in the design, construction and commissioning of the tracking detector for the HERA-B experiment. In 2000 she returned to CERN and in 2001 she joined CERN as staff scientist in the ATLAS experiment at the LHC, where she participated in the design and construction of the challenging central tracking detector.

As expert in the design and construction of particle detectors and the management of large technological projects, she moved on to lead the CERN Detectors Technology Group at CERN from 2012 to 2017. The group, comprising around 150 research and technical staff, is focussed on developing detector technologies and systems for ongoing and future particle physics experiments.

Since 2017 she has led the Project and Planning Group of the Technology Department at CERN and continues to work closely with the LHC experiments, coordinating the technical evaluation process of the upgrade projects for their detectors systems.

She has participated in the proposal and management of technological projects co-financed by the European Commission and coordinated by CERN. Among others, the SLHC-PP design study for upgrading the LHC accelerator and detectors, and the Marie Curie training networks TALENT and STREAM, both focused on the development of novel particle detector technologies.

Dr. Capeáns has published more than 450 scientific articles in the field of High Energy Physics and Instrumentation, is editor of the Journal of Instrumentation (JINST), and has served as advisor in Scientific Councils, for the evaluation of competitive funding of particle physics programs internationally, as well as for programs of the European Commission.

