

Amaia Villa

Researcher and leader of the line of specialization *mechatronic systems for scientific and applied instrumentation* in TEKNIKER

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Amaia Villa is a nuclear physicist and has a PhD in Physics from the Universidad Complutense de Madrid. She has worked in different applications of nuclear physics, and during the thesis she specialized in the development and use of different simulation tools to study the interaction of radiation in matter. More specifically, her work was focused on the design, optimization and characterization of clinical and preclinical radiotherapy equipment. This knowledge provided her with competences to work in different fields related to nuclear physics and since she started to work in TEKNIKER in 2022, she joined several projects related to nuclear physics performing radiation calculations, with special emphasis on those related to technological development for fusion as an energy source. From the beginning of 2024 she leads the line of specialization *mechatronic systems for scientific and applied instrumentation* to guide TEKNIKER in the capacitation to face the technological challenges in fusion, particle accelerators and astrophysics, fundamentally. Related to this, in close collaboration with the university of the Basque Country, she is a thesis supervisor for the design, development and characterization of instrumentation for compact particle accelerators in TEKNIKER. Since its foundation, Amaia is member of the Women in DONES (WiD) group, whose main goal is to highlight the relevant role of women in the fusion energy and science, in general, and in the DONES program, in particular. Finally, she contributes to the spread of knowledge of nuclear medicine collaborating in the group “Medicina Nuclear” of “Jóvenes Nucleares”.