



## Alberto Maistrello

Electrical Engineer, researcher with Consorzio RFX in the field of the power supplies for nuclear fusion experiments ... and beyond!

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## Work experience



Responsible officer for the 400 kV substation supplying RFX-mod and the ITER Neutral Beam Test Facility.

In the years 2015 - 2019 responsible for the RF R&D at Consorzio RFX, for the development of the High Voltage Radiofrequency Test Facility.

Since 2020 responsible for the design and development of the electrical modifications and improvements of the SPIDER Beam Source.

In the framework of the European and Japanese collaboration of the Broader Approach responsible officer for the Quench Protection Circuits for the JT-60SA superconducting coils since 2016.

Since 2015 participating in the European DEMO project with the preliminary design of the Fast Discharge Units and since 2020 as task coordinator for the R&D on advanced converters and energy storage systems to supply superconducting coils and Heating & Current Drive loads.

Tutor for degree and PhD thesis projects.

## Main publications

E. Gaio, A. Ferro, **A. Maistrello**, M. Dan, F. Lunardon, L. Barucca.S. Ciattaglia, G. Federici, I .Benfatto, *"The EU DEMO Plant Electrical System: Issues and perspective"*, Eusion Engineering and Decign Volume 156 July

Fusion Engineering and Design Volume 156, July 2020

R. Piovan, E. Gaio, F. Lunardon, **A. Maistrello**, "MEST: A new Magnetic Energy Storage and Transfer system for improving the power handling in fusion experiments".

Fusion Engineering and Design. 146, 2176–2179 (2019).

**A. Maistrello**, M. Dan, V. Corato, K. Sedlak, E. Gaio, "Preliminary studies on DEMO toroidal field circuit topology and overvoltage estimation". Fusion Engineering and Design (2019)

**A. Maistrello**, P. Jain, M. Recchia, E. Gaio, "Studies on the requirements and design of the High Voltage Radio Frequency Test Facility". Fusion Engineering and Design. 131, 96–104 (2018).

**A. Maistrello** et al., "Experimental Qualification of the Hybrid Circuit Breaker Developed for JT-60SA