



Roberto Cavazzana

- Research Physicist
- Data Acquisition Support Group Leader

Consorzio RFX - Corso Stati Uniti 4 35127 Padova
roberto.cavazzana@igi.cnr.it
+39 049 829 5992

ABOUT ME

Since 1998 he has been at Consorzio RFX, Padova as research physicist. He is active in designing, developing and exploiting a range of plasma diagnostic systems (microwave reflectometry, magnetic measurements and Langmuir probes), along with experimental planning. His main areas of research interests cover edge plasma physics, atmospheric plasma sources and real time plasma controls.

EDUCATION

- 1998 Degree (Laurea) in Physics
Università di Padova
- 1995 Master degree in Engineering and Physics of Plasmas.
Università di Padova
- 1994 Ph.D. in Energetics Università di Padova

EXPERTISE

- Design, configuration and optimization of plasma operation of RFX-mod in both RFP and Tokamak configuration. Design and optimization of real time plasma equilibrium control systems.
- Design, realization, installation and commissioning of diagnostic systems for fluctuation measurements on both high temperature (fusion) and low temperature (industrial) plasma devices: microwave reflectometry, Langmuir probes, magnetic probes, gas puffing imaging, signal conditioning and data acquisition systems.
- Design and optimization of low temperature plasma sources and devices, either at low and atmospheric pressure.
- Experiment integration, handling and operating liquid Lithium devices, in limiter and evaporator operation, density control experiments, first wall conditioning techniques.
- Coordinator of the CODAS technical support group at Consorzio RFX, since 2018.
- Task Force leader of the Task Force “Optimization of RFX-mod discharges: RFP, tokamak and non-standard plasmas” in years 2009—2010, bringing the device to its maximum plasma current capability of 2 MA.

ROLES

- Coordinator of the CODAS technical support group at Consorzio RFX, since 2018.
- Task Force leader of the group for “Optimization of RFX-mod discharges: RFP, tokamak and non-standard plasmas” in years 2009—2010, bringing the device to its maximum plasma current capability of 2 MA.
- Session leader during experimental campaigns of RFX-mod
- Supervisor of undergraduate and graduate students.

SUMMARY OF PUBLICATIONS

- 157 papers in peer-reviewed journals
- 1597 non self-citations in articles
- 70+ conference contributions
- 2 invited talk at international conference
- Co-inventor in 5 patents on plasma devices and applications