

Matteo Agostini is a CNR researcher at Consorzio RFX where he carries out his research activity. He graduated in Physics at Università di Padova in 2003, where he obtained also the PhD in Physics in 2007, with a thesis about the study of the turbulent transport in magnetised plasmas.

He works in the spectroscopy group of Consorzio RFX, and he is involved in the study of the edge turbulence of RFX-mod experiment and in the characterization of the ion beam extracted from the negative ion source SPIDER.

For RFX-mod he is responsible of the spectroscopic diagnostics in the visible range for studying the plasma edge, both fluctuations and electron profiles. For SPIDER, he is responsible of the visible cameras used for the tomographic reconstruction of the ion beam extracted from the source.

**Spectroscopic Diagnostic:** he developed the Gas Puff Imaging Diagnostic (GPI) for studying the edge turbulence of RFX-mod experiment and the Thermal Helium Beam (THB) for the measurement of the radial profile of the edge electron temperature and density.

**Characterisation of the plasma edge turbulence:** He study the behaviour of the plasma edge turbulence with different diagnostics, in particular with spectroscopic ones, characterising the spectral and statistical properties of the edge region of RFX-mod, TPE-RX, NSTX and Alcator C-Mod, with several visits to Princeton Plasma Physics Laboratory (NSTX) and MIT (Alcator).

**Tomography:** He works on tomographic inversion developing different tomographic algorithms for measuring the two dimensional emission profile of plasma from the measurement of the line integrated signals. In particular, he develops algorithms for imaging the turbulence in fusion experiments and for obtaining the 2D map of the emission of the neutral beam of SPIDER and MITICA.