Tipo di tesi: Triennale
Corso di Laurea: Fisica
Tipologia: sperimentale
Titolo della tesi: Measurement of electron density in radiofrequency plasmas by means of wave detection
Proponente/Relatore RFX: G. Serianni, M. Zuin
Relatore Accademico: G. Serianni
Capogruppo: Zuin
Responsabile di Programma: Peruzzo
Argomento della tesi:
The proposed thesis work will focus on the experimental analysis of plasmas generated by means of radiofrequency electromagnetic fields. The results of electron density measurements from different diagnostic techniques will be compared. In particular, the detection of the plasma wave frequency will allow an absolute estimation of the electron density, which will be compared with that deduced by Langmuir probes. A variety of experimental conditions will be explored in terms of coupled power to the plasma, working gas (He, Ar, N will be used) and pressure.
The student will design and realize part of the diagnostic set-up, participate in the experiments and in the data analysis.

Competenze richieste (se necessarie):
Data della proposta: 28/04/2022
Stato: non assegnata
Laureando/a: (quando sarà assegnata)