

Ph.D. roadmap

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Overview

This Ph.D. is conducted at the Swiss Plasma Center (SPC) under the supervision of Stefano Coda and Dmytry Myktychuk.

The focus of this first part will be the development of a Beam Emission Spectroscopy (BES) diagnostic on TCV, in order to measure the density fluctuations during tokamak operation.

Secondly, the work will move on the calibration of the Motional-Stark Effect (MSE) diagnostic, already implemented on TCV.

Currently to do

1. Adding BES, MSE, and NBI2 characteristics to the SPC wiki.
2. Getting used with the matlab code for MSE.
3. Parametric description of the neutral beam.
4. Having a look at plasma instabilities.