**Cycle of studies:** Bachelor (Laurea Triennale)

**Degree course:** Energy engineering (Ingegneria dell'Energia)

## Title of the thesis:

Measurement of DC current component in the MITICA Acceleration Grid Power Supply inverter system **Type:** Experimental / Modelling

## **RFX Supervisor:**

L. Zanotto

Academic supervisor: P. Bettini Head of the RFX research group: E. Gaio

Leader of the RFX research program:

V. Toigo

## Description of the thesis:

The thesis deals with the measurement of the dc current component in the inverters of the MITICA Acceleration Grid Power Supply. After a literature survey on the subject of dc current generation and control on three phase inverter systems supplying power transformers, the student shall analyze the precision of the present current transducers and assess the use of new transducers or methods to estimate the dc current component supplied by the inverters in different load conditions and transients.

Previous experience (if necessary) none

Date: 10/03/2022

Status: Available

Name of the student: (when assigned)