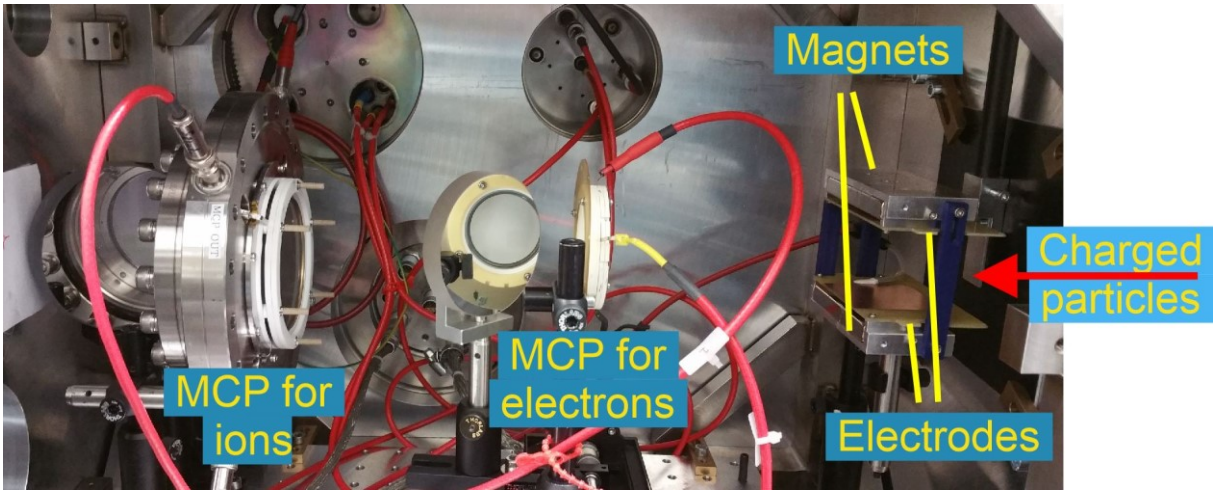
Bachelor thesis / Master internship

NLO-THZ group

Detection of energetic charged particles using a particle spectrometer

As a part of an ongoing project, we would like to measure charge and energy of accelerated particles (electrons and ions) during high intensity laser-plasma interaction. The measurements are performed in real time by using an active-single-shot energy spectrometer, this spectrometer can use electric and magnetic fields to deflect the charged particles according to their q/m and energy.



The applicant will join us during the beam time in the lab for a nice opportunity to learn about the femtosecond laser system in JETI40, building and performing alignment of an optical setup, using diagnostic tools to detect electrons and other charged particles, and analysing the data.

We are looking for motivated students with the desire to work in a team between the lab and the office. Basic background in Matlab (or similar) is beneficial.

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