

## UV laser beamline diagnostic @REGAE

For the UV GUN laser beamline @REGAE a highly precise virtual cathode diagnostic is required to meet the high demands to generating and control of ultra low intensity electron bunches. The design is done and the diagnostic has to be tested in the REGAE laser lab and later set up at the UV laser beamline in cooperation with experienced members of the group. If the diagnostic could be successfully integrated laser beam alignment and characterization is an important task of the project.

The aim is to impart basic concepts of beam transport and practical experience/knowledge about the interplay of lasers and particle accelerators.

There isn't any prior knowledge strictly required. Nevertheless knowledge about data analysis, some programming skills and fundamental knowledge about lasers are helpful.

### Group

MIN/MPY

### Project Category

A5. Lasers and optics

### Special Qualifications

**Primary author:** HACHMANN, Max (MIN (Koordination))

**Co-author:** FLOETTMANN, Klaus (MPY (Beschleunigerphysik))