

# PEGASUS – A versatile spin-polarized electron target

*Monday, 24 April 2017 19:10 (2 hours)*

We present PEGASUS, a versatile and mobile spin-polarized electron target designed, constructed and build at GSI. It consists of a laser diode driven bulk GaAs photocathode, extraction energies up to 10 keV and an electrostatic cylindrical bender turning the polarization angle. First results characterizing the beam parameters will be shown, as well as proposed experiments, focussing on the dissociation of molecular ions in storage rings through polarized electrons. Also, ideas for experiments with chiral molecules and H+3 will be presented.

**Primary author:** Mr SCHURY, Daniel (GSI, Darmstadt)

**Co-authors:** KALININ, Anton (GSI, Darmstadt); KOZHUHAROV, Christophor (GSI, Darmstadt); Dr LESTINSKY, Michael (GSI, Darmstadt); HAGMANN, Siegbert (Goethe-Universität Frankfurt(UFfm-IKP)/GSI-Darmstadt); SCHIPPERS, Stefan (JLU Giessen); STÖHLKER, Thomas (GSI, Darmstadt)

**Presenter:** Mr SCHURY, Daniel (GSI, Darmstadt)

**Session Classification:** Posters

**Track Classification:** Instrumentation