

# Status of the precision high voltage divider for the electron cooler at CRYRING

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The low energy storage ring CRYRING is currently being commissioned as the first storage ring for FAIR phase 0 at GSI. CRYRING features an electron cooler to cool stored ions and thus achieve a low momentum spread of the beam. To determine the velocity of the ions a precise knowledge of the electron cooler voltage is essential. In earlier measurements of hyperfine transitions in hydrogen- and lithiumlike ions at the Experimental Storage Ring (ESR), the limiting uncertainty was the voltage measurement. To minimize this uncertainty we construct a high-precision divider for voltages up to 35 kV which will be similar to the ultrahigh-precision dividers used at the KATRIN experiment. The accuracy of the divider will be in the low ppm range and will allow for measurement uncertainties in the  $<10 \text{ E-5}$  region. The characteristics of the final design and the current project status will be presented. This work is supported by BMBF under contract number 05P15PMFAA and HGS-Hire for Fair.

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