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## Developments for a proton irradiation site at the HISKP of Bonn University

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A new proton irradiation site for NIEL damage studies is currently being developed at the Bonn isochronous cyclotron of the HISKP. Irradiations with a proton energy of 12.7 MeV at device location and currents up to 1  $\mu\text{A}$  are possible. A unique feature of the site is the newly installed beam-diagnostics system. It allows the determination of the proton fluence at percent level and can be used as an online feedback system for beam current and position steering. The irradiation setup is nearly complete and proof-of-concept irradiations of BPW34F diodes were performed to determine the proton hardness factor. The setup, calibration results, and challenges will be presented.

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