

Status of the FAIR pbar target and separator

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In the future FAIR facility at GSI in Darmstadt, Germany, a multitude of experiments with an antiproton beam is foreseen. It is planned to produce these antiprotons in a collision of a primary proton beam with a metal target. A Ni rod will be bombarded with a pulsed beam of 29 GeV protons with an intensity of 2.5×10^{13} ppp and a repetition rate of 0.2 Hz. Directly after the target the antiprotons will be focussed by a magnetic horn operated with an current of 400 kA. In the proceeding magnetic separator antiprotons with an energy of 3 GeV ($\pm 3\%$) will be selected and transported to the collector ring for cooling. The setup of the target and separator area, including radiation protection issues, will be presented.

Summary

The status antiproton production target for the future FAIR facility will be presented.

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