

## COOLING EXPERIMENTS AT COSY IN PREPARATION FOR THE HESR

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### *Abstract*

The cooler synchrotron COSY can be both from hadron physics point of view as well as from the accelerator side looked at as the smaller predecessor of the proposed High Energy Storage Ring (HESR) at the Facility for Antiproton- and Ion Resoearch (FAIR) in Darmstadt. Both electron and stochastic cooling are foreseen in the HESR to fullfill the demanding requirements on beam quality from the PANDA experiment. Intense beam dynamic studies and prototype testing for HESR have been and will in future be performed at COSY to study beam equilibrium properties under the influence of thick internal targets, stochastic and electron cooling in a storage ring. Results of simulations and measurements will be presented.

**CONTRIBUTION NOT  
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