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## PERC - A clean, bright and versatile source of neutron decay products

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Neutron beta decay is an excellent system to study the charged weak interaction experimentally. The decay is precisely described by theory and unencumbered by nuclear structure effects. Observables are numerous correlation coefficients, spectra and the neutron lifetime. Precision measurements in neutron beta decay are used to investigate the structure of the weak interaction and to derive the CKM matrix element  $V_{ud}$ .

In this talk, I will focus on the new experiment PERC, which is currently under construction at the FRM II, Garching. Its main component is a 12 m long superconducting magnet system. PERC is designed to improve measurements of several correlation coefficients by an order of magnitude. I will present the concept of the instrument as well as its current status.

**Primary author:** MAERKISCH, Bastian (Universität Heidelberg)

**Presenter:** MAERKISCH, Bastian (Universität Heidelberg)

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