Past experiments and possible future experiments with high resolution X-ray detectors

Friday, 19 October 2018 10:00 (30 minutes)

The application of Gamma and X-ray detectors in exotic atom research has already a quite long history. On the one hand spectroscopy was used to study high Z kaonic atoms, low Z atoms recently by SIDDHARTA and last but not least to extract the up-to-now much precise masses of the charged kaon and the sigma, on the other hand the dynamics of processes in higher quantum states of exotic atoms were studied like muon transfer reactions. For these investigations different detector systems were used. New X-ray detectors are needed to attack still open issues in exotic atom research. Selected past experiments and possibilities for future investigations will be discussed.

Summary

The field of high resolution X-ray spectroscopy will be discussed with selected past experiments and possible future experiments applying new detectors.

Primary author: Dr MARTON, Johann (Stefan Meyer Institute)Presenter: Dr MARTON, Johann (Stefan Meyer Institute)Session Classification: X-rays in nuclear physics