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Status of Hypertriton Binding Energy Measurements at the Mainz Microtron

In recent years the method of decay-pion spectroscopy was pioneered at the Mainz Microtron (MAMI). This method has the potential to achieve ground state mass measurements of light hypernuclei with unprecedented precision. It is aimed at statistical and systematic uncertainties in the Lambda binding energy of about 20 keV. Ongoing activities for hypertriton measurements at MAMI will be presented. The hypertriton provides several important benchmarks for the strong interaction theory dealing with strange baryons, comparable to the role of deuterium for conventional baryon interactions. A hypernuclear physics campaign with a lithium target is foreseen in the future. It will be complemented by extensive calibration measurements.

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