

## 8th Beam Telescopes and Test Beams Workshop



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# High rate electron beam tests with HV-MAPS prototypes at MAMI

*Friday 31 January 2020 11:30 (20 minutes)*

The Mainz Microtron (MAMI) is an electron accelerator at the Institute for Nuclear Physics in Mainz, that provides beam energies of up to 1.6 GeV.

With its narrow beam profile, quasi continuous stream of particles and beam currents of up to 100 mA it is well suited for diverse test beam applications.

One of them is the high rate testing of detector prototypes.

In this talk recent beam time results of 2019 will be discussed.

It includes high rate tests of MuPix8 prototypes as well as their behavior after an exposition to significant electron doses.

This will be especially relevant for the envisaged usage of this sensor type in the P2 parity violating experiment at the new Mainz Energy-recovering Superconducting Accelerator (MESA).

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