

## 8th Beam Telescopes and Test Beams Workshop



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# Comparing electromagnetic particle showers for electrons and positrons - a BL4S experiment

*Thursday, January 30, 2020 11:00 AM (20 minutes)*

By winning the international contest Beamline for Schools, we, a team of six high school students, got the opportunity to conduct our own experiment at the DESY II Test Beam Facility in October 2019. In the experiment we searched for a difference between the electron and positron, concerning the development of electromagnetic particle showers. To measure the spatial evolution of particle showers, slabs of tungsten and copper of different thicknesses were placed in between six silicon sensor planes of a beam telescope.

In this presentation we will give a further explanation of our experiment and share our preliminary results.

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