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LYCORIS - Large Area Strip Telescope — TIES BEHNKE, •UWE KRÄMER, MARCEL STANITZKI, DIMITRA TSIONOU, and MENGQING WU — DESY, Hamburg, Germany

The DESY II testbeam facility provides an electron/positron beam with an energy of up to 6 GeV used for detector development. To meet the user requirements, a number of different devices are provided at the testbeam facility such as the EUDET-type silicon telescopes based on the MIMOSA 26 chip and a large 1T solenoid with a 85 cm usable inner diameter. While the EUDET-type telescopes have excellent performance, their comparably small active area of $1 \times 2 \text{ cm}^2$ and large support structure, prevent their use with a large Device Under Test (DUT) within the solenoid.

As part of the AIDA2020 project, a new telescope, providing a large coverage area of $10 \times 20 \text{ cm}^2$ with minimal support structure and able to be installed within the solenoid is being developed. The telescope consists of 3 sensitive layers on each side of the DUT. Each layer consists of two $10 \times 10 \text{ cm}^2$ SiD silicon strip sensors that are read out via a KPiX readout chip bump bonded directly onto the sensor. In this talk, the current status of the project, including the readout and the sensors is presented.

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