

## Contribution submission to the conference Aachen 2019

**The LYCORIS Large Area Strip Telescope** — TIES BEHNKE, RALF DIENER, •UWE KRAEMER, MARCEL STANITZKI, and MENGQING WU — DESY, Hamburg, Deutschland

The continued drive to develop high precision detectors puts large demands on the test beam facilities. As part of the AIDA2020 project, the LYCORIS high precision large area silicon telescope is being developed as an upgrade of the DESY II Test Beam Facility.

LYCORIS is made of multiple  $9.3 \times 9.3 \text{ cm}^2$  silicon strip sensors based on a hybrid-less design. This design is realized by routing the charge signal gathered in the strips through an extra metal layer to the KPiX readout chip which is bonded directly to the surface of the sensor. This allows the system to achieve a strip pitch of  $25 \mu\text{m}$  and being read out via only a small Kapton flex cable.

The current status of the project will be presented. This includes the hardware itself as well as the latest results from beam tests to determine the system's performance.

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