



Contribution ID: 180

Type: **Oral presentation (in person)**

## The Quest of Building a TPC Field Cage

*Tuesday, 9 July 2024 12:00 (20 minutes)*

For ILD, one of the detector concepts for the proposed International Linear Collider, a time projection chamber (TPC) is foreseen as the central tracking detector. The R&D effort within the LCTPC collaboration has been centred around a common infrastructure setup operated at the DESY II Test Beam Facility. This setup includes a large field cage as test bed for the different readout technologies to be studied under comparable conditions. A second iteration of this field cage has recently been constructed to improve on the shortcomings noticed with its predecessor. The construction was repeatedly delayed and interrupted due to the COVID-19 pandemic but these delays yielded insights that may not otherwise have been observed during an ordinary course of operations. Methods and findings from the build process will be reported.

### Apply for poster award

**Primary author:** SCHAEFER, Oliver (DESY Hamburg)

**Presenter:** SCHAEFER, Oliver (DESY Hamburg)

**Session Classification:** Vertex, Tracking, Timing detectors

**Track Classification:** Physics and Detector: Vertex, Tracking, Timing