

A telescope road movie

A story about how everybody can bring science forward

I don't usually start stories for *ILC NewsLine* with the word 'I'. This time I have to make an exception, because for a change I was not merely a spectator and communicator of science, but a facilitator (of sorts). One of the actors in something both very mundane and very exciting: transporting scientific equipment from one lab to another. On Sunday 30 May, the [EUDET beam telescope](#) was brought from DESY to CERN, and I was one of its (three) drivers.

The telescope goes to CERN for a round of shifts with upgrades for the ATLAS detector at the Large Hadron Collider (LHC) and a few other R&D projects. It thus has an extremely full agenda at CERN until the end of November (the time when telescope manager and part-time science delivery woman [Ingrid Gregor](#) gets back into the telescope van and hauls it all back to DESY, hopefully seeking driver company).



The EUDET beam telescope before it was stored in transport boxes. *Image: Ingrid Gregor*



Enough space for the telescope and a few extras. *Image: Barbara Warmbein*

The beam telescope is about as versatile as the people who use it. You need it to check whether what you think you see with your detector really is there, a sort of cross-check mechanism, only with lots of added value. In labs around the world, scores of physicists are already working on new generations of particle detectors – like the ones busy taking data at the LHC at CERN right now, but even faster and ready for the next generation of accelerators. These new devices need to be tested. There are test beams at all the major labs around the world, including DESY and CERN, and depending on the particles and beam times available you choose where you test your detector. So that's why sometimes the telescope has to move from one place to the other.

So on Sunday morning, (almost) at 8:30 sharp, the three drivers were there to load the remaining transportable goods into the van. The telescope, safely packed into two crates, and its support structure, were loaded on Friday; what remained was a collection of items that somehow all had to get from DESY to CERN – three

removal boxes whose owner now needed them in his office at CERN, the bicycle of driver number three, Volker Prah, for mobility between the two CERN sites, two crates of beer for Germans living in France missing a good brew, Volker's wife's legendary salad, my less legendary meatballs, Ingrid's eclectic CDs and all the necessary paperwork. A box of electronics also needed to go back to Göttingen university, which lies at about one quarter of the way.

We had agreed to rotate driving duty and I got to go first. And then, well – it all went well. We made it to the Göttingen appointment albeit it with a two-hour delay, narrowly missed an empty-tank moment just outside Heidelberg, drove past a clouded Blackforest panorama, watched strawberry pickers from our elevated van seats, used the magic word 'CERN' to get passage stamps from German and Swiss customs, and only in France a few metres from our final destination did we overlook a speed bump, giving the telescope a good rattle. But it survived, was put up the next week, and is now serving the first user group, the ATLAS pixel developers and the British Fortis team.

Science is about big questions and incredible quests. It inspires and awes and makes you wonder about the wondrous things the human brain is capable of. In order to get to the quests and questions though, you need a lot of nuts and bolts and muscle. A twelve-hour trip in the car, a couple of weeks in the test beam with the telescope can mean an important, maybe decisive step towards a new technology and a new era in science... I am happy to report that I have now done my little bit to help future discoveries onto their feet, along with a bowl of salad and some Queen classics.

-- *Barbara Warmbein, ILC Communicator*



Telescope transport now departing from Halle II. *Image: Barbara Warmbein*



...arrived and ready to take beam at CERN. *Image: Sune Jakobsen*

About the EUDET Telescope:

- [Joint Research Activity main page](#)
- [Users' page](#)