Wire chamber construction in the Hungarian National Teachers Programme at CERN

Dezső Horváth

Wigner Research Centre for Physics Budapest, Hungary and Institute for Nuclear Research (Atomki) Debrecen, Hungary







HUTP 2016-2018: MWPC

 Building cloud chambers in S'Cool Lab most popular Hungarian

Construction steps: Monday evening

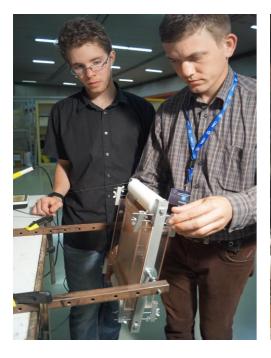




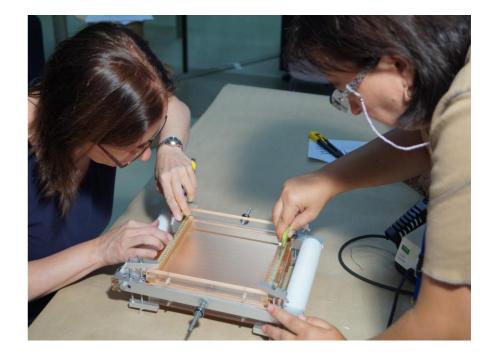
D. Varga explains how to do it Glueing the body together



Preparing the wires





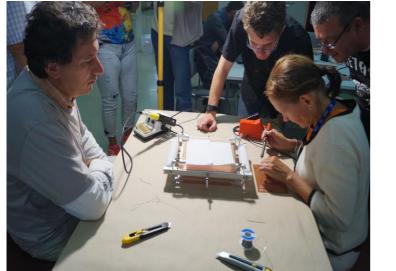


Wire rolling on

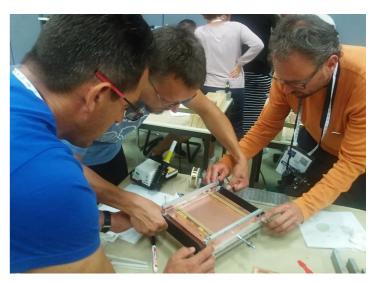
Wire soldering

Wire cutting

Construction steps: Tuesday



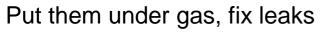




Soldering the electronics boards for the chambers

Closing up the chamber



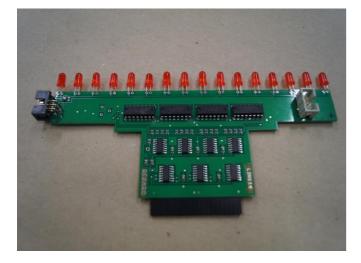




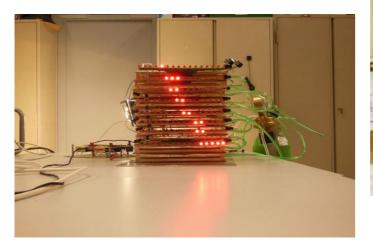
Soldering on the outside connectors and electronics



Wednesday: gassing. Thursday: prepare trigger!!



Pre-fabricated display board



Cosmic muon flying through



Happy, but tired, with working chambers

News about it in Hungary



Journal of the Roland Eötvös Physical Society of Hungary,

Issue April 2018, front cover

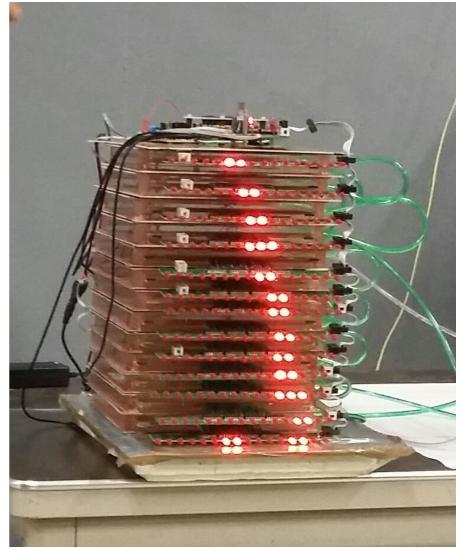
TEACHING PHYSICS

D. Horváth: Hungarian teachers and students learn particle physics at CERN M. Kiss: Theory of relativity in high school – otherwise T. Stonawski, T. Gálik: Water thermometer? Then if it is freezing! *É. Kirsch:* Report on the 61st Conference of Hungarian physics teachers

Friday: present results

Possibilities for high schools

- Good exercise for both teachers and students: work together
- Developing manual skills
- Talent care for students
- . Group work, team building
- Cooperation among schools
- ...and with universities
- Motivation raising



2018: a tower of 3 years result