



Wir schaffen Wissen – heute für morgen

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Outreach activities of the laboratory for particle physics at PSI

Measurement of the proton radius

- Nature-paper [Nature, 466, 213-216 (8 July 2010)] on the measurement of proton radius had a large resonance (experiment needed ~20 years, the measurement was done in a few weeks)
 - title page of nature
 - many invitations for talks (mainly scientific but also “popular”)
 - many articles in press, radio interviews etc.

Other results made it to the PSI-Website and triggered a press release:

- Muon life time (MuLan) [Physical Review Letters DOI:10.1103/PhysRevLett.106.041803]
- 1st CMS paper ($dN/d\eta$) [Journal of High Energy Physics, Februar 2010; DOI: 10.1007/JHEP02(2010)041]. Analysis was done with (almost) the pixel detector only (which was mainly built at PSI). PSI release was few weeks later than UNIZH and ETHZ, coordination was not optimal
- Swiss economic award for Dectris (a spin-off company CMS/PILATUS pixel groups), appeared a few weeks later on the PSI web page

side remark: We had to learn how to cooperate with the PSI communication department



“Einstein”, SF (25.11.2010):

- <http://www.sendungen.sf.tv/einstein/Sendungen/Einstein/Archiv/Einstein-vom-25.11.2010>
- Portrait of Rolf Heuer
- Feature on heavy ion run at LHC, including an interview with R. Horisberger
- no echo in PSI communication



Public talks (all by R.Horisberger)

- “Course” at the Volkshochschule ZH
- Energy-Apero, Aargau
- Public talk at PSI “Forschung live erleben”
- Talk Volkshochschule Waldshut/D planned

nEDM Art Project (Philipp Schmidt-Wellenberg)

- create an artwork in connection with science
- funding for the realisation of 2 projects
- Philipp even gives courses at the ZHdK
- http://ucn.web.psi.ch/nedm_artproject/index.htm



KANTON AARGAU

Einladung zum Energie-Apéro Aargau

Die Physik des grossen Teilchen-Beschleunigers am CERN

Baden	Dienstag, 18. Januar 2011 Alstom Korinex, Baden	17.30–19.30 Uhr
Lenzburg	Donnerstag, 20. Januar 2011 Gemeindesaal, Lenzburg	17.30–19.30 Uhr

Particle Physics Praktikum with UniZH and ETHZ:

- Suffers from low participation of students after introduction of Bachelor/Master system
- Now students from Heidelberg attend

Supervision of Maturaarbeiten (U. Langenegger)

- Cosmic Muons (rate, direction, energy spectrum)
- CMS data
 - Students found the J/ψ peak and measured the p_T spectrum (in good agreement with the official CMS values)

iLab <http://ilab.web.psi.ch/>

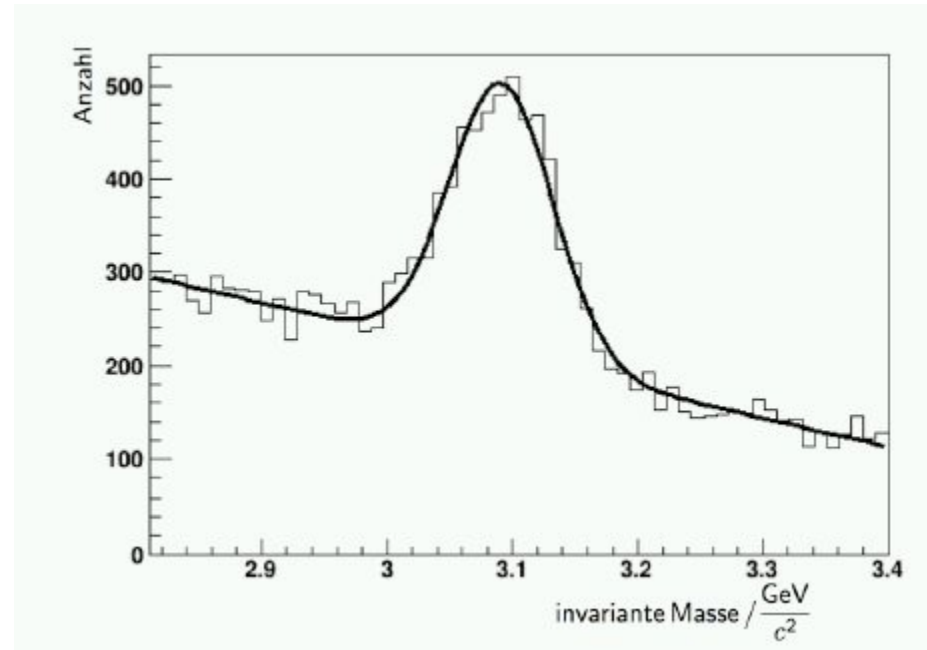
- for school students in age of **14-15 yrs**
- program:
 - Do experiments: 2 topics available (sound or vacuum)
 - Visit of exhibition (PSI forum)
 - Visit of a research facility at PSI
- **about 200 classes per year**
- very positive feedback (by students, teachers, and politicians)

PSI Feriencamp

- 1 week at iLab for children **> 6 yrs**
- first time in July 2011 (during the school vacation)
- already 3 times overbooked
- (only for children of PSI employees)

Nationaler Zukunftstag:

- Attended by about 50 girls



PSI forum

- 2 exponents related to particle physics
 - “visualisation” of cosmic muons
 - demonstration of accelerator
- “Cinema”
 - 3D movie on protons/neutrons for material research
 - 3D movie on carbon cycle in the atmosphere
 - Movie on CMS planned (footage ready), but postproduction by the Filmhochschule seems difficult (took already several year)
- about 15000 visitors per year



Guided tours

- about 450 groups per year
- topics
 - energy research
 - accelerator complexes
 - proton therapy

Open day

- last one 2008: >12000 visitors
 - Exhibition of the laboratory for particle physics was well attended
- next: 16.10.2011
 - topic: “year of chemistry” (not clear if particle physics will be represented)



- PSI and the laboratory for particle physics runs many outreach activities
- Cooperation between the laboratory for particle physics and the communication department improved a lot
- There is still some room for improvement to give particle physics more attention in the PSI communication (e.g. PSI web-site)

