



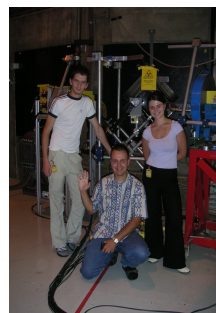
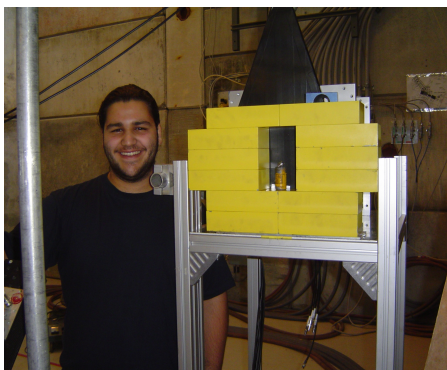
Particle Physics Practical Course at the Paul Scherrer Institute (PSI, Switzerland) in Summer 2013

What's up ?

- During the semester break in summer we perform at the Paul Scherrer Institute (Switzerland) a real beam-line experiment to teach students in **experimental particle physics**.
- About 10-12 students from the ETH Zurich and the Universities Zurich and Heidelberg spend two to three weeks at PSI to perform an experiment. The course includes lectures about several topics of experimental techniques. Main emphasis, however, is put on the practical work and “hands on”.
- Students plan and construct a small experiment from unused detector components. After commissioning the real fun starts: data taking all day and night (7/24) using one of the beamlines at PSI. During and after data taking a full analysis of the data is performed and summarised in a written document.

Examples from previous measurements:

- Branching Ratio: $B(\pi \rightarrow \mu \nu) / B(\pi \rightarrow e \nu)$
- Panofski Ratio: $B(\pi p \rightarrow n \pi) / B(\pi p \rightarrow n \gamma)$
- Lifetimes and decay parameters of muons and pions



Date of next course:

26. August - 13. September 2013

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Limited number of places, please register!

This course (MVPSI) is part of the Master Programme at the Faculty of Physics and Astronomy in Heidelberg!

