Beta lab: Introduction and Prerequisites

Hanno Perrey

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Recent changes for the β lab:

- no need to write a report for the β lab anymore!
- changes concept of lab: focus on "hands-on" experimentation instead of following a recipe to record required data
- this is the first time with the new schedule: will have to improvise a little

Schedule:

- Morning: quick warm-up discussion about β decay, scintillator detectors, then we measure the Q value of $^{32}P \rightarrow ^{32}S + e^- + \bar{\nu}$
- Afternoon: research projects in small groups; pick (or suggest) a topic and document your investigation
- (Late) afternoon: concluding discussion and presentation of findings

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Grading

- obviously no report anymore.
- still need to get a "godkänt".
- what I expect (and what will make the lab the most fun): participate actively
- ask questions, take part in the discussions, make suggestions, take initiative when investigating your project, present the results in the end
- but your feedback is also vital: hand in your comments before leaving

Preparations

- the old lab manual is obsolete and the new one still not quite done...
- you will get a printed copy of the manual when you come to the lab
- digital copies will be available by the end of the week on the course's website

Before coming to the lab:

- Read Krane chap. 7.3, 7.6 (3 pages), 9.1, 9.2 and 9.3.
- Bring your laptop computer (!)
- Install Python and SciPy (scipy.org)

If you have questions, contact me: hanno.perrey@nuclear.lu.se

See you soon!

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