

Introduction and organizational aspects

B. Heinemann

LUXE meeting, Feb. 1st 2018

August workshop

- Aug. 21-23 in Sem. Rm 4
- Indico page being finalized: <https://indico.desy.de/indico/event/19493/>
- Local organizing committee:
 - B. Heinemann, S. Krohn, J. List, R. Matthes + ?
- Scientific organizing committee being formed: M. Wing is chair
- Fee is 100 Euros incl, dinner (Rickmer Rickmers) and reception
- Need to start advertising to people



DETECTOR DEVELOPMENT.

**DESY, Hamburg location, is seeking:
Scientist (f/m) for LUXE Experiment**

DESY

DESY is one of the world's leading research centres for photon science, particle and astroparticle physics as well as accelerator physics.

The particle physics programme of DESY includes strong contributions to the LHC experiments at CERN, the Belle-II experiment at KEK, the ALPS-II experiment at DESY, and the preparation of future experiments. The experimental programme is enhanced by collaboration with a strong theory group.

The XFEL is a new unique X-ray light source designed for a broad range of science from applied materials research to fundamental physics. The unique properties of the electron beam offers the possibility to test quantum electrodynamics (QED) in the critical field regime, never probed before. This critical field was predicted by Schwinger, and can be achieved within the rest frame of the electron if the high-energy electrons interact with a high-intensity field of laser photons. A study is currently starting to evaluate the feasibility of such an experiment to test strong-field QED at the XFEL, using a set of electron, positron and photon detectors just before the XFEL electron beam dump. The experiment needs to be designed such that it is fully parasitic to standard XFEL operation.

The position

- Perform simulations of the Experiment and the relevant aspects of the beamline
- Develop the framework of the experiment and the setup, in interactions with theorists
- Determine specifications of the experimental setup
- Construct and test prototype detectors in test beam

Requirements

- PhD in physics (experimental physics)
- Background in experimental particle physics
- Experience with scientific programming techniques
- Experimental skills and interest in instrumentation development
- Good knowledge of English and teamwork abilities

For further information please contact Prof. Beate Heinemann (beate.heinemann@desy.de) or Dr. Jenny List (jenny.list@desy.de).


The position is limited to 2 years


- We now have the DSF fund and postdoc ad is posted:
<http://www.desy.de/v2/docs/1516705309-e.pdf>
- Also on inspire:
<http://inspirehep.net/record/1651357?ln=en>
- Deadline: Feb. 27th
- Please, advertise it to potential candidates

Communication

- We now have a mailing list (thanks Matthew!)
- We also have our own indico category:
<https://indico.desy.de/indico/category/612/>
- Made confluence page and tried to give access to everyone
 - <https://confluence.desy.de/display/LUXE/LUXE>
 - Contains the todo lists currently only
 - Please let me know if you don't have access yet
 - You need to ask your system admin of DESY account to give access to confluence

Confluence page

 Spaces ▾ People Create ...

 LUXE ☆

Pages


Blog

SPACE SHORTCUTS

Here you can add shortcut links to the most important content for your team or project. [Configure sidebar.](#)

PAGE TREE

- List of issues / questions to be worked on
- LUXE: Experiment/Detector aspects
- LUXE: Laser aspects
- LUXE: machine aspects
- LUXE: Other things to do

Pages 

Edit Save for later Watching Share ...

LUXE

Beate Heinemann posted on 04. Jan. 2018 16:53h - last edited by Beate Heinemann on 29. Jan. 2018 13:51h

This is the main entry page for the LUXE proto-collaboration.

- Meetings occur every month: <https://indico.desy.de/indico/category/612/>
- List of questions and preliminary answers
 - LUXE: Laser aspects
 - LUXE: machine aspects
 - LUXE: Experiment/Detector aspects
 - LUXE: physics case and theoretical aspects
 - LUXE: Other things to do

About us

LUXE related material

New collaborators and funding

- Aharon Levy (Tel Aviv University) joined meeting today
 - Expertise on particle physics detector development and analysis
 - Synergy with ILC luminosity?
 - Halina Abramowicz also plans to join
- We need "laser people" as collaborators for many reasons.
 - Joachim Mnich emphasized this in recent discussion
 - Ideal would be laser people from German universities for funding reasons
- Joachim thinks DFG would be ideal for funding in Germany
 - We need ideally some German universities
 - I suggest we go through this carefully among hep experimentalists and make plan
- ERC grants
 - I can apply for advanced grant (2.5M for 5 years + 1M extra for "start-up costs")
 - Call for 2018 expected in May 2017
 - Synergy grant: joint proposal of several institutes (up to 10M for 6 years)
 - <https://erc.europa.eu/funding/synergy-grants>

Next meeting

- Next meeting is on March 1st
 - I will not be able to attend unfortunately (due to vacation)
- Meeting after that: March 29th or April 5th?

Reminder: time line

- XFEL council meets each year in May
 - Better if people hear officially (even when still early days) instead of hearing through the grapevine
- Proposed time line
 - Prepare slides for May 2018 (XFEL director can choose to show or not)
 - Letter of Intent by May 2019
 - First full draft by end of 2018
 - (Full) proposal by May 2020