

NEWSLETTER

CUI – Graduate School
No.1, October 2012

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Editorial

This is the first Newsletter of the Graduate School of the excellence cluster The Hamburg Centre for Ultrafast Imaging – Structure, Dynamics and Control of Matter at the Atomic Scale. The official starting date of the Cluster is scheduled for November 1, 2012.

The organization and coordination of the Graduate School has already commenced and the internal advertisement for the first round of positions has been published. Many of the planned structures and projects will be soon operational. We are trying to do our best in order to attain one of the main goals of the Centre, that is, to provide an interdisciplinary and highly innovative educational programme in Hamburg. We hope to inform you with this Letter on many relevant issues concerning the Graduate School and the Centre for Ultrafast Imaging in general.

We do hope that you enjoy reading it. You are warmly welcome to provide us with contributions, give us feedback, and make suggestions for improvements and addenda.

Antonio Negretti and Peter Schmelcher

General

The graduate school is an integrated part of our Hamburg Centre for Ultrafast Imaging (CUI) and aims at an excellent education and training of our Ph.D. students. The latter is of particular importance for CUI, since the research to be performed is of highly interdisciplinary character and will touch upon the traditionally separate fields physics, chemistry and biology. In the following we would like to inform you about the possibilities CUI offers for the education and promotion of young researchers.

Membership of the graduate school

All Ph.D. students financed by the CUI are automatically members of

the graduate school: here, please note that only Ph.D. students in the first year of their studies can start working on CUI projects.

Other Ph.D. students working on the CUI projects, i.e., which are not financed by CUI, are strongly encouraged to become members too and will then enjoy the corresponding advantages (see the section 'Being a Ph.D. student of CUI').

Every Ph.D. student will have an Advisory Board consisting of a supervisor and a co-advisor. At least one of the members of the Advisory Board must be member of the University of Hamburg.

This way of mentoring will strengthen the profile of the young researchers and it will enable an

optimal monitoring of the student's progress. Two meetings per year between the Advisory Board and the Ph.D. student are envisaged.

Research training and course programme

Excellent research at the level of young scientists needs a sophisticated educational and training programme. That is why we will offer a tailored course programme which meets the requirements of highly interdisciplinary research. The format of the modules for training is flexible and can consist of, e.g., lectures, seminars, journal clubs, or block courses which will be offered regularly.

The course programme consists of modules focusing on the topics of

the Research Areas A, B, and C of CUI, but in particular also of shared and global modules providing close links between the areas. Our course programme will start in the Sommersemester 2013.

Ph.D. students of the CUI are asked to take two hours of coursework weekly during the semester, and to attend two courses during their studies to train their personal and professional skills (see also the section 'Being a Ph.D. student of CUI').

Being a Ph.D. student of CUI

Becoming a member of CUI implies for the Ph.D. students several interesting advantages and exciting perspectives. First of all, the possibility to enjoy an extremely interdisciplinary research environment and doctoral programme with scientists at the forefront of their research fields.

An important aspect of the Ph.D. training is the attendance of scientific events. To this end, students that are members of CUI can apply for funds for workshops, conferences, visits to national and international institutes and centres in the framework of collaborative projects, etc. Furthermore, they have the opportunity to organize their own winter or summer school on a specific topic with the financial support of CUI. All of the above requires the submission of a short proposal to the graduate school of CUI (see e-mail at the end of this Newsletter). Guidelines on this will be soon available and posted on the CUI web-pages.

The picture of a scientist is radically changed in the last few decades. Indeed, being a scientist nowadays does not only mean to have an excellent scientific research record, but pronounced personal and professional skills too. To this aim, students at CUI have the opportunity to acquire this expertise, as time and project management, scientific writing, presentation skills,

etc. Corresponding courses will be offered regularly.

Workshops

Workshops are important events to disseminate the research results and to verify the state of the work plan of CUI as well as an opportunity for young researchers and students to interact with experts in the field and strengthen their communication skills (poster or oral presentation).

We aim at a yearly workshop which serves to increase the international visibility of CUI. These workshops have an extremely interdisciplinary character, and therefore the attendance of Ph.D. students is strongly encouraged. They will last between 3 and 5 days, where the first days are devoted to the progress of the CUI projects. Thus, such events serve also as the CUI-annual meeting. The second part will involve both high profile international guests and CUI speakers.

The first workshop, *Ultrafast Imaging of Quantum Objects*, is scheduled for 2013.

Guest programme and colloquia

A very rich and interesting guest programme will bring internationally recognized scientists to the University of Hamburg. Such visits will range from a few days to several months. Members of CUI are invited to make suggestions and to submit a short proposal to the graduate school (same procedure as above indicated).

In addition to this, CUI aims at establishing high-ranking colloquia talks three times per semester. The speakers will be international leading experts with an exceptional high profile. Prior to the colloquium a short talk from a CUI member on a hot research topic of CUI will take place.

International recruitment

The CUI aims at the recruitment of excellent students from all over the

world. For this purpose an effective and tailored strategy is required. In the first round all Ph.D. and postdoc positions will be internationally advertised both in print media (Physik Journal and Physics Today) and online (pro-Physik). For future application rounds we will establish an online application and following selection procedure. More details on this will follow soon.

Important dates

On Friday November 2, 2012, we will have our Kick-off meeting at CFEL (lecture hall ground-floor) at 3:15 pm. We very much hope that you all come. Besides informing you about the status, there will be plenty of time for discussions.

In February 2013 a delegation of the Deutsche Forschungsgemeinschaft will visit us for getting informed about the status of CUI.

Board of Directors and Administration

The members of the Board of Directors are:

- Prof. D. Miller (CFEL)
- Prof. K. Sengstock (ILP)
- Prof. H. Weller (IPC)
- Prof. M. Drescher (CFEL)
- Prof. H. Chapman (CFEL)
- Dr. G. Grübel (DESY)
- Prof. P. Schmelcher (ZOO)

The administrative coordination and the central office of CUI is lead by Ms. Claudia Busch.

Dr. Antonio Negretti is the coordinator of the graduate school of CUI.

You are welcome to:

- i. send us suggestions of topics which you would like to be mentioned in the next Newsletter
- ii. send us proposals for invitation of guests, etc.
- iii. send us suggestions for highlights of Ph.D. work within CUI
- iv. give us feedback in general

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