2nd international workshop on

Physics in Intense Fields

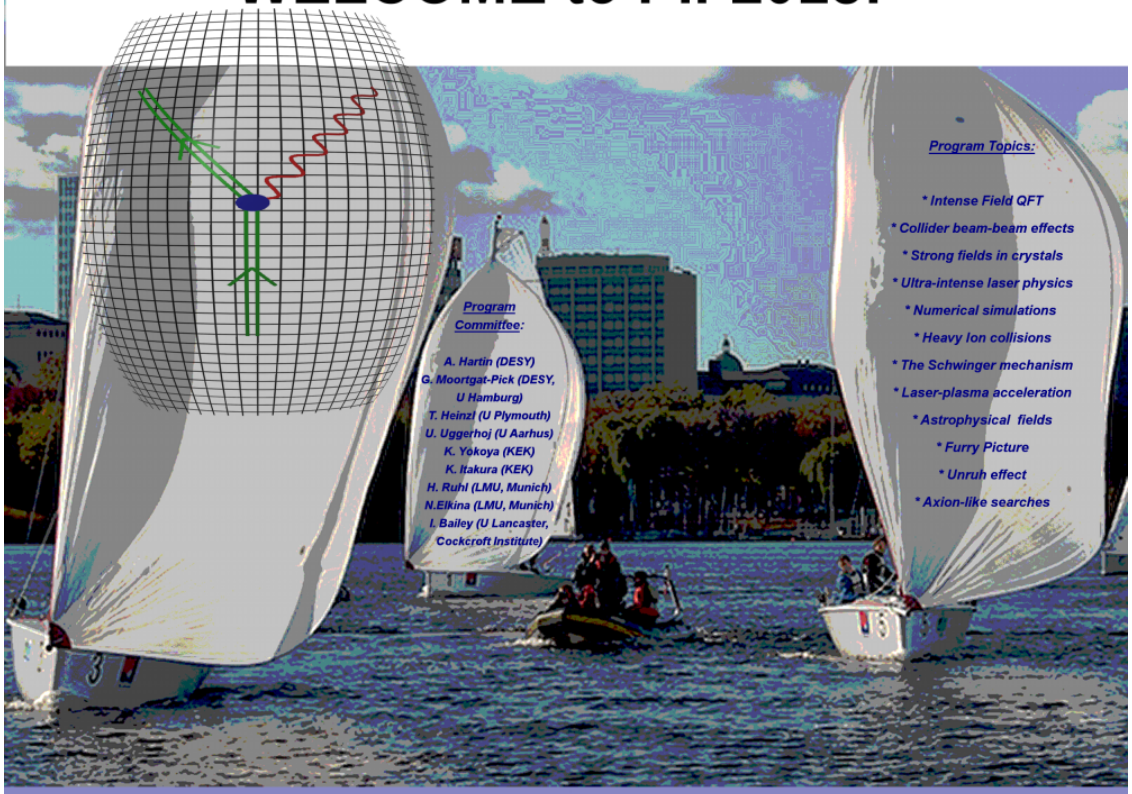
DESY, Hamburg, 9-11 July 2013

High intensity LASERs and FELs, interactions in crystalline lattices, intense charge bunch collisions at the next generation of energy-frontier colliders, heavy-ion collisions, plasma acceleration and magnetars, all involve physics processes in ultra-intense electromagnetic fields. It is of critical importance to consider interactions with such strong fields as precisely as possible in order to understand experimental outcomes, provide additional tests of our theoretical models, and to aid the development of new experimental technologies.

The purpose of this workshop is to review the state of the art in strong-field physics. Theoretical calculations, experimental tests and simulation of physics in high intensity fields will all be examined. PIF2013 continues a series of related workshops held over previous years.

We welcome participation from all interested parties.

WELCOME to PIF2013!



Program Committee:

A. Hartin (DESY)
G. Moortgat-Pick (DESY, U Hamburg)
T. Heinzl (U Plymouth)
U. Uggerhoj (U Aarhus)
K. Yokoya (KEK)
K. Itakura (KEK)
H. Ruhl (LMU, Munich)
N.Elkina (LMU, Munich)
I. Bailey (U Lancaster, Cockcroft Institute)

Program Topics:

* *Intense Field QFT*
* *Collider beam-beam effects*
* *Strong fields in crystals*
* *Ultra-intense laser physics*
* *Numerical simulations*
* *Heavy Ion collisions*
* *The Schwinger mechanism*
* *Laser-plasma acceleration*
* *Astrophysical fields*
* *Furry Picture*
* *Unruh effect*
* *Axion-like searches*

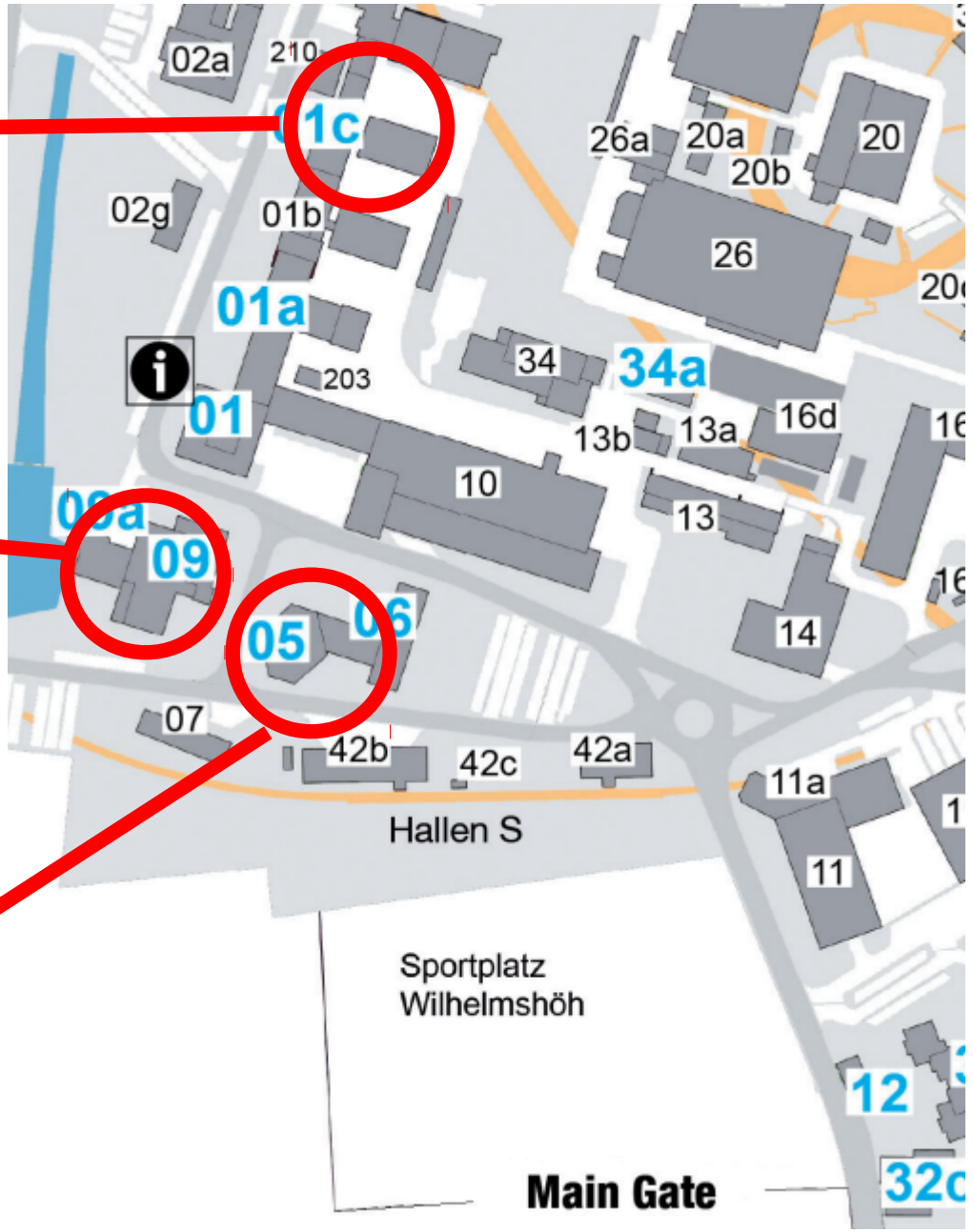
Confirmed speakers: G. Dunne, C. Keitel, A. Pukhov, K. Yokoya, N. Narozhny, C. Müller, M. Zepf, J. Kirk

Workshop Convenor: A. Hartin Workshop Secretary: M. Clayton
More information and registration at: https://indico.desy.de/event/pif2013

Seminar Room 4
Talks on 3 days
Tea and Coffee

Canteen and Bistro
Lunch (own expense)
Reception Tues 18.30
Dinner Wed 19.00

Auditorium
Workshop Photo (outside)
Tues 16.50
Gerald Dunne talk Tues 17.00



PIF2010 KEK, Japan
3 days of talks
Very interesting program!

Advanced QED methods for future accelerators

chaired by Ian Bailey (Cockcroft Institute/ University of Liverpool), Anthony Hartin (DESY)

from Tuesday, March 3, 2009 at **09:30** to Wednesday, March 4, 2009 at **16:30** (GMT)
at **Cockcroft Institute (Walton Room C)**
Daresbury Laboratory, Warrington Cheshire WA4 4AD UK

Description This is a joint IPPP Durham/Cockcroft Institute/ICFA workshop on advanced QED methods for future accelerators. The workshop emphasis is on bunch-bunch interactions and aspects of polarised beams, in the context of future high-energy e+e- colliders.

With the advent of high-luminosity electron-positron accelerators working at the TeV energy scale and with the resulting extreme environments expected during bunch-bunch collisions, urgent further attention must be given to the impact of quantum effects on the design of such machines.

ICFA
An ICFA workshop

In particular, formalisms for describing radiative processes and the methods of calculation in the future strong-field environments must be reviewed and the boundaries of validity of higher order perturbative calculations determined.

Thus the central aim of the workshop is to make progress on the development of exact theoretical methods for evaluating beam induced effects (beamstrahlung, bremsstrahlung, etc.) and spin dynamics for the beam conditions at TeV colliders.

Methods of calculation to be reviewed include, but are not limited to, inclusion of the fields at Lagrangian level, the "Operator" method for ultra-relativistic particles and QED calculations using light-cone coordinates.

Reports on the status of the models implemented in existing simulation codes will be given, and discussions about ways to improve

Advanced QED methods, Daresbury UK 2009
Guest of honour: V. Baier