

Accelerating Researcher Careers

Prof. Carsten P. Welsch

TRAINING THE
NEXT GENERATION
OF **PARTICLE**
ACCELERATOR
EXPERTS

LANET

OPAC

DIETANET

Particle Colliders

Lithography

Accelerator-Driven
Reactors

Material Irradiation

Food Processing

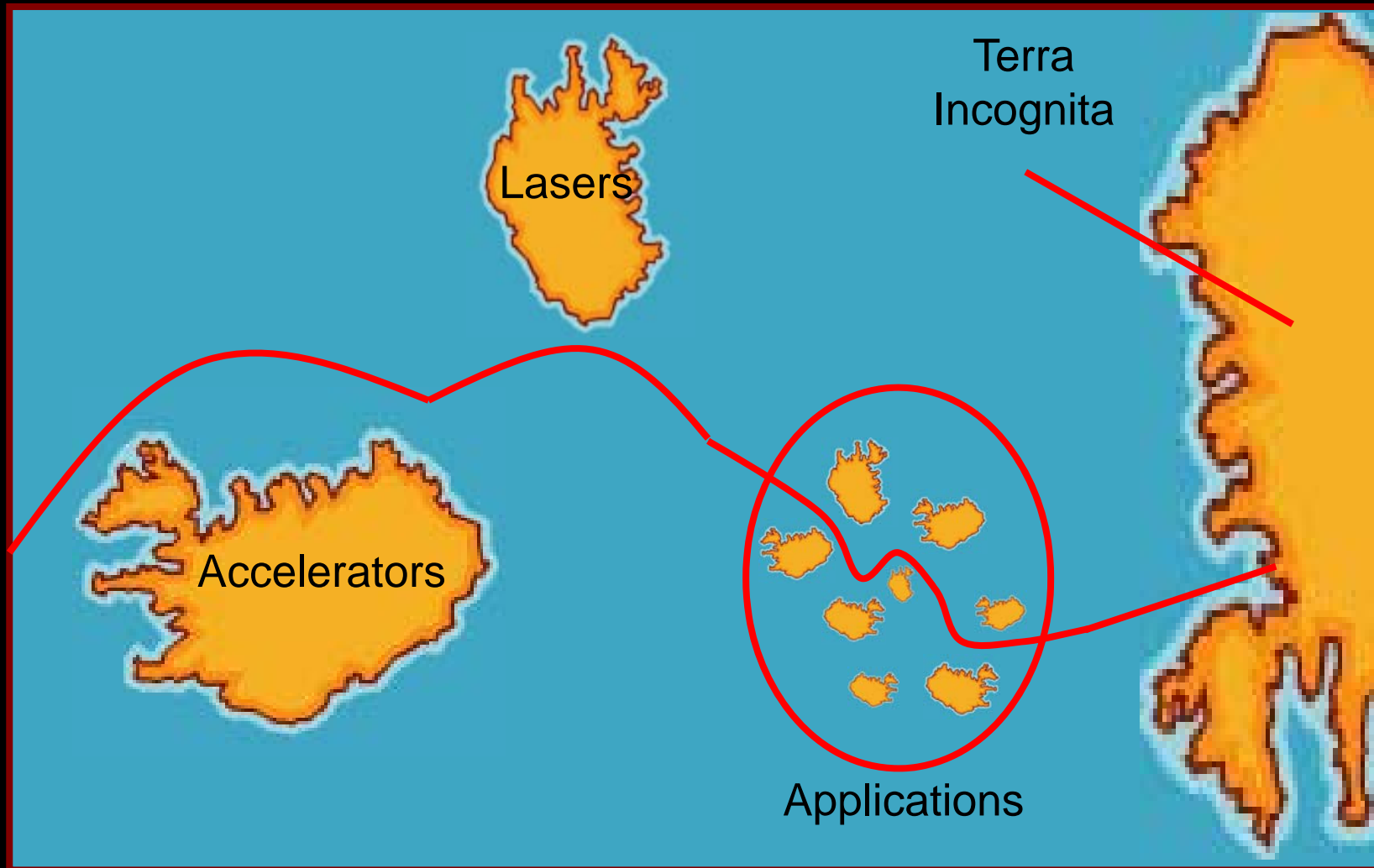
Antimatter ‚Factories‘

Medical Accelerators

Spallation Sources

Light Sources

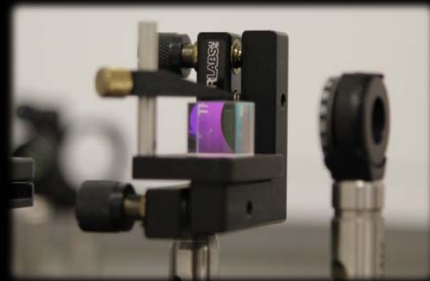
Today



Also excellent for training



Image: Mariusz Sapinski, CERN



- Detector design
- Physics
- Engineering
- Lasers and optics
- IT: Monte Carlo studies
- Electronics
- Vacuum technology
- Cryogenics
- Accelerator operation
- Data analysis

LA³NET

Open Positions with the LA³NET Project

Lasers have become increasingly important for the successful operation and continuous optimization of particle accelerators.

Laser-based particle sources are well suited for delivering the highest quality ion and electron beams, laser acceleration has demonstrated unprecedented accelerating gradients and might be an alternative for conventional particle accelerators in the future, and without laser-based beam diagnostics it would not be possible to unravel the characteristics of many complex particle beams. Within LA³NET, laser applications for particle accelerators will be developed within an international network.

The network is currently aiming to recruit a pool of talented, energetic, strongly motivated, early stage researchers with a degree in physics or a closely related field. Possibilities for enrolling into a PhD program exist. Women are especially encouraged to apply.

Each researcher will benefit from a wide ranging training program that will take advantage of both local and network-wide activities, as well as of schools, conferences, and workshops. Excellent salaries will be offered. Most positions are for starting in spring 2012.

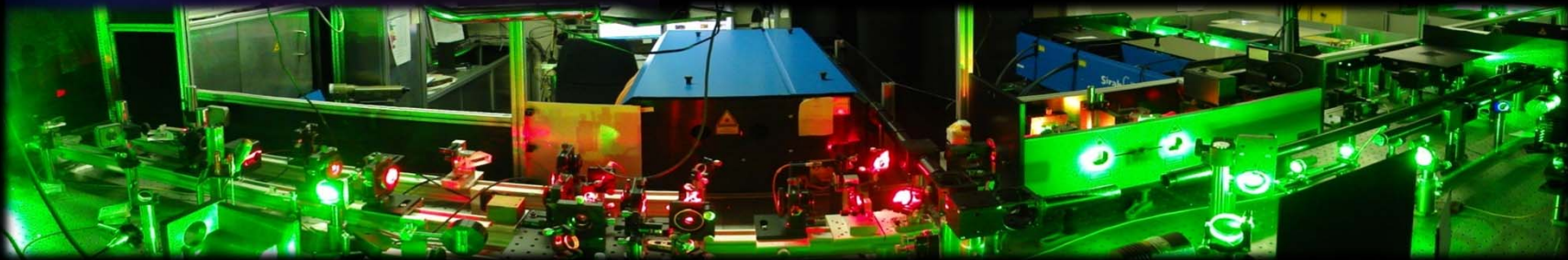
You will find more information about LA³NET, all research projects and the application details at: <http://www.liv.ac.uk/la3net>

Contact and further details:

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- **L**aser **A**pplications for **A**ccelerators – A Marie Curie **N**etwork

- **19** Fellows
- **36** Partner Institutions
- **4.6 M€**



oPAC – largest EU network



**OPEN POSITIONS
WITHIN THE
OPAC PROJECT**

The optimization of the performance of any particle accelerator ultimately depends on an in-depth understanding of the beam dynamics in the machine and the availability of emulation tools to study and continuously improve all accelerator components. It also requires a complete set of beam diagnostic methods to monitor all important machine and beam parameters with high precision and a powerful control and data acquisition system.

Within the oPAC project these aspects will be closely linked with the aim to optimize the performance of present and future accelerators that lie at the heart of many research infrastructures.

The network is currently aiming to recruit a pool of talented, energetic, strongly motivated, early stage researchers with a degree in physics, electrical engineering or a closely related field. Possibilities for enrolling into a PhD program exist. Women are especially encouraged to apply.

Deadline for applications:
March 9th 2012

Each researcher will benefit from a wide ranging training program that will take advantage of both local and network-wide activities, as well as of schools, conferences, and workshops. Excellent salaries will be offered. Most positions are for starting in summer 2012.

You will find more information about oPAC, all research projects and the application details at:
<http://www.liv.ac.uk/opac>

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- Optimization of Particle Accelerators
 - 23 ESRs
 - 40 Partner Institutions
 - 6 M€



Enhanced Training

- Fellow R&D
- Researcher skills training
- Dissemination and Outreach
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