

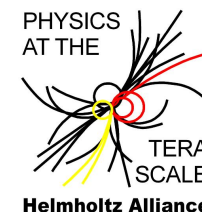
Proton Structure in the LHC Era

Welcome and Remarks from the Analysis Centre

Thomas Schörner-Sadenius
DESY-FH



Hamburg, 22 October 2012



WELCOME ...

- > ... to the third “PDF school” of the Analysis Centre after 2008 and 2009.
 - Schools organised by the Analysis Centre were always considered one of the strong points of the Alliance “Physics at the Terascale”.
- > ... to three days of lectures, tutorials, and discussions.
 - Plus a PROSA meeting (Tuesday, 8:00 pm).
- > ... to Hamburg ...
 - Maybe you have some time – and good wheather - to enjoy the city?
 - I assume that of those not based in Hamburg most have already been to Hamburg (and DESY) before. Who is here for the first time?



ALLIANCE “PHYSICS AT THE TERASCALE”

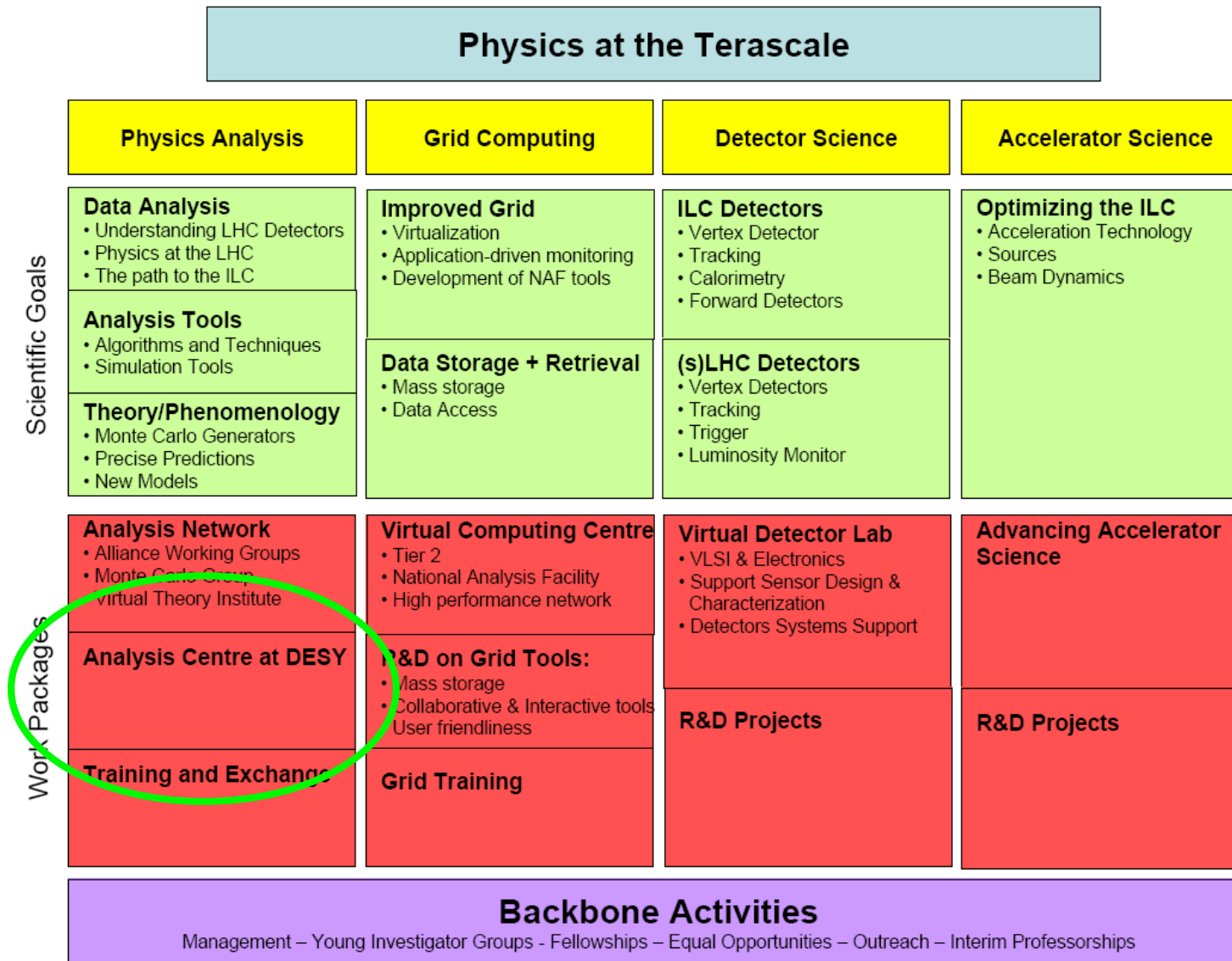
From the Alliance proposal (2007):

In order to optimally place German particle physics in an increasingly global environment, it is now the right moment to create **new and improved structures for particle physics** in Germany.

The Strategic Helmholtz Alliance 'Physics at the Terascale' is a structured research network comprising 18 universities, 2 Helmholtz institutes and 1 Max Planck Institute. The Alliance acts as a tool for a more effective collaboration, in particular between experimentalists and theorists.



THE ANALYSIS CENTRE



THE ANALYSIS CENTRE

1. Member support (MC, statistics, PDFs, etc.)
2. “Education”: Schools, workshops, ...
3. Networking; definition and exploitation of synergies
4. Contributions to the LHC programme



SCHOOLS AND WORKSHOPS

Helmholtz Alliance
PHYSICS AT THE TERASCALE

Deutsches Elektronen-Synchrotron DESY + + + Karlsruher Institut für Technologie + Großforschungsbereich + + + Max-Planck-Institut für Physik + + + Rheinisch-Westfälische Technische Hochschule Aachen + + + Humboldt-Universität zu Berlin + + + Rheinische Friedrich-Wilhelms-Universität Bonn + + + Technische Universität Dortmund + + + Technische Universität Dresden + + + Albert-Ludwigs-Universität Freiburg + + + Justus-Liebig-Universität Gießen + + + Georg-August-Universität Göttingen + + + Universität Hamburg + + + Ruprecht-Karls-Universität Heidelberg + + + Karlsruher Institut für Technologie - Universitätsbereich + + + Johannes Gutenberg-Universität Mainz + + + Ludwig-Maximilians-Universität München + + + Universität Paderborn + + + Universität Regensburg + + + Universität Rostock + + + Universität Siegen + + + Julius-Maximilians-Universität Würzburg + + + Bergische Universität Wuppertal + + +

PHYSICS AT THE TERASCALE
Helmholtz Alliance

Analysis Centre Schools and Workshops 2012

Introductory School to the Terascale
5-9 March 2012
terascale.de/intro2012

Monte Carlo School 2012
12-16 March 2012
terascale.de/mc2012

Statistics School 2012
2-5 April 2012
terascale.de/statistics2012

Detector Workshop 2012
14-16 March 2012
terascale.de/detws2012

Event Generators & Resummation
psr12.desy.de

Top Quark Workshop 2012
22-23 March 2012
terascale.de/top2012

Software & Computing Workshops and Schools
terascale.de/computing2012

SMA and Single-top Workshop
26-28 March 2012
terascale.de/singletop2012

http://www.terascale.de/schools_and_workshops

www.terascale.de/schools_and_workshops



SCHOOLS AND WORKSHOPS

[illegible]

OTHER ACTIVITIES

- > Analysis Centre seminar on relevant issues, somewhat orthogonal to standard seminars.
- > Workshops on any topic of relevance and interest.
- > “Theorist of the week” programme at DESY and elsewhere.
- > Analysis Centre studentships – allowing students to enrich their CVs with one more topic they have worked on for a limited time, supported by the Analysis Centre
- > Guest support
- > ...



FUTURE OF THE ALLIANCE

- > The “Terascale Alliance” comes to an end in 2012.
- > During the past 5.5 years, HGF has supported the Alliance with 25 MEU.
- > Future support much diminished, will finally become part of DESY base funding.
- > School and workshop programme will continue, largely funded by DESY.
- > Your wishes and input vital – please let us know what you think we should organise!!!



THE ANALYSIS CENTRE

anacen@desy.de


www.terascale.de/anacentre



APC 2012

Proton Structure in the LHC Era
from Monday 22 October 2012 (08:00) to Wednesday 24 October 2012 (18:00)

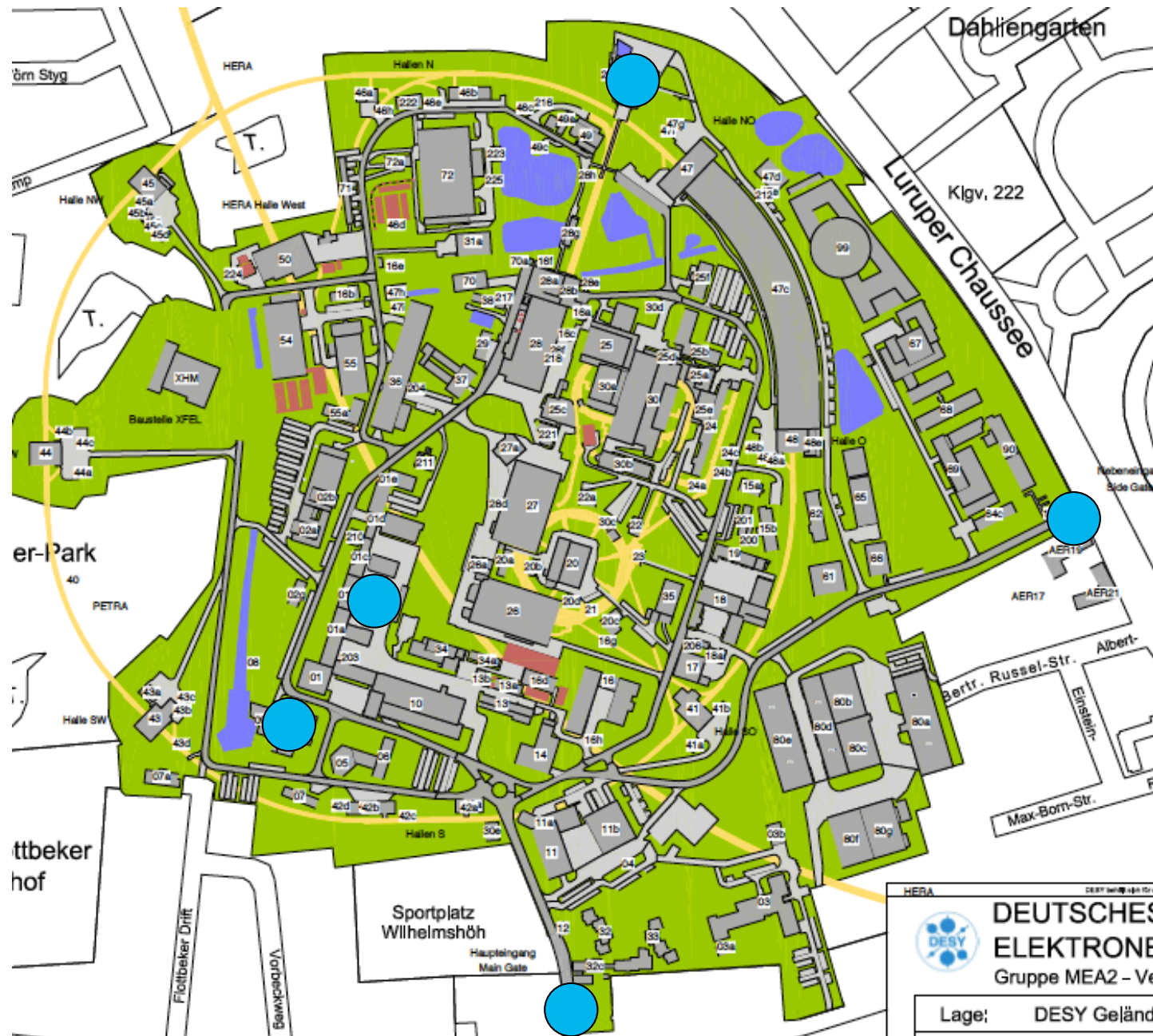
: Sessions / : Talks : Breaks

	Monday 22 October 2012		Tuesday 23 October 2012		Wednesday 24 October 2012	
AM	09:00	Lecture: QCD factorisation - Sergey Alekhin (Institute for High Energy Physics (Protvino, Russia))	09:00	Lecture and tutorial: FastNLO - Klaus Rabbertz (University of Karlsruhe) Daniel Britzger	09:30	Lecture: LHC measurements relevant for PDFs
	10:00	Lecture: PDF determinations and their ingredients - A. Cooper-Sarkar (Oxford)  Amanda Cooper-Sarkar (Oxford University)	10:30	--- Coffee break ---	10:30	--- Coffee break ---
	11:00	--- Coffee break ---	11:00	Lecture and tutorial: ApplGrid - Pavel Starovoitov (DESY) Mark Sutton	11:00	Tutorial: Including additional measurements - Krzysztof Nowak (DESY)
	11:30	Lecture: Comparing data and theory at the LHC - Judith Katzy (DESY)	12:30	--- Lunch break ---	12:30	--- Lunch break ---
	12:30	--- Lunch break ---				
PM	14:00	Lecture: QCD evolution with QCDNUM - Botje Michiel (NIKHEF)	14:00	Lecture and tutorial: OPENQCDRad - Sergey Alekhin (Institute for High Energy Physics (Protvino, Russia))	14:00	Discussion of results and school closing
	14:45	Lecture: PDF reweighting - Alberto Guffanti (University of Freiburg)	15:30	--- Coffee break ---		
	15:30	--- Coffee break ---	16:00	Lecture and Tutorial: Uncertainty treatment in PDFs - Alexander Glazov (DESY)		
	16:00	Lecture and tutorial: QCD fit tools - HERAFitter: overview and examples - Volca Radescu (DESY) Ringail Placakyte (Desy-Atlas)				

Tuesday, 20:00 – SR 5:
PROSA meeting!



DESY – LOCAL FACILITIES



OTHER PRACTICAL INFORMATION, REQUESTS

- > Please keep your laptops shut during lectures – this is a question of courtesy towards the speaker.
- > Please fill in the feedback questionnaires we will hand out on Friday – they will help us to improve!
- > In case of (organisational) questions, don't hesitate to ask me or our secretaries (DESY phone numbers 4453, 3429, 93429)
- > Listen, work, discuss – and enjoy!
- > Virtual machine images – available on memory sticks later (still working)
 - > Hope all goes well – maybe some workarounds needed here and there.



THANKS TO ...

- > ... to your home institutes
 - ... for contributing to the budget and sending you here!
- > ... to the Helmholtz Alliance
 - ... for the money and the framework!
- > ... to all lecturers and tutors
 - ... for their immense work!
- > ... and finally to all people behind the scenery which are necessary to put things in place:
 - Secretaries, technicians, IT, ...

