

Future of the Analysis Centre

... and status, questions, criticisms ...

Thomas Schörner-Sadenius 

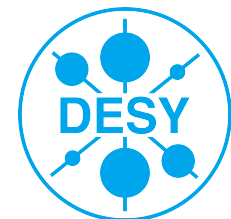
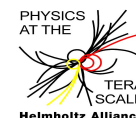
DESY Hamburg
8 November 2010



Helmholtz Alliance

PHYSICS AT THE TERASCALE

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



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No discussion of single projects – this will happen for the individual groups.

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WHY IS THE CENTRE USEFUL AND NEEDED?



> Potential for support of general-purpose activities.

- Organisation of dedicated workshops (“Single-top”, “MPI”, ...).
- Starting initiatives like “unfolding” project.
- Organising (**limited, DESY**) dedicated manpower (TMVA, Roostats, MC studies of “ridge”)



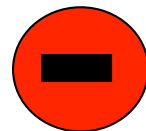
> Contacts and connections → identify interesting topics and organise collaboration.

- **Wanted / needed?**
- **Role of DESY compared to CERN? Of TSS compared to Mangano/LPCC?**



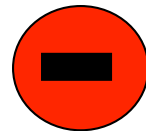
> Organisation of schools, training events and workshops for the entire community.

- Considered (**the only?**) one strong point.
- From **time to time** external requests for support / organisation etc.



> Original proposal: Analysis support / connection to NAF.

- > **Nothing** so far – frameworks, data combination etc. not wanted/needed, mostly at CERN.
But need stronger **involvement with NAF?**



> Collaborative tools???? **What (documentation, data bases, MOSIS)? Manpower?**



> Position of Leader of Analysis Centre:

- Needed to keep things together and push further?



NEEDED TO MAKE IT A SUCCESS?

- > Need to realise that substantial progress only with substantial (DESY) manpower.
 - LPC@FNAL: 6 (dedicated) fellows per year
 - Definite contributions from universities to be expected? Concept of forming additional project teams from interested people from all sides failed/difficult?
 - Re-consider own group “Alliance” at DESY? (later)
 - Consider more dedicated resources (manpower) for Analysis Centre?
- > Need to work project- and “brand”-driven.
 - Directions to be set not only by interests of individuals. Individual versus “DESY / Alliance” branding?
 - Consider finalisation, implementation and promotion of products.
 - Need sufficient resources to have short-term impact on upcoming issues.
- > Concretely: re-organisation and “Experimental / Pheno Centre” (later)
- > Time! LPC@FNAL took 5 years to get started.
 - Impression: Increase in organisation (workshops etc.) requests and questions.
 - Some interest from other players (LPCC) → danger of promising more than we can keep.



OPEN QUESTIONS? FAILED EFFORTS?

> Lots!

- > Project X based at university Y: Connection to Alliance? No convincing use-cases.
- > Networking idea (MC network, statistics network): Failed?
- > Mentalities?
 - Theorists + experimentalists who don't collaborate?
 - Examples: PDFs – ABKM+HERA-PDF; MC – common CMS+ATLAS studies; etc.
- > Experiment-independence?
 - Want to be forum between theory/ATLAS/CMS – but not allowed to talk?
➔ idea of network across experiments failed?
- > CERN attracts all interesting activities – no use-case for doing things at DESY?

> Failed efforts?

- > Some of the “Analysis Working Groups”?
- > Theorist of the week?
- > Analysis Centre studentships?
- > Attraction of fellows?
- > Analysis Centre seminar?



PROPOSAL

Physics and Data Handling Centre

Organisation

- Schools, training
- Workshops
- seminars
- Guests, student-ships, TOW
- Orga + contents

Exp. Centre

- Project-driven
- Across former “projects”
- applied fellows

Pheno Centre

- Project-driven
- Applied fellows
- Overlap with Pauli centre etc.
- With UHH, HU, Zeuthen

Projects

- Alignment
- MC tuning
- Unfolding
- Minimisation
- SUSY / BSM parameters

Projects

- A new MC generator
- CASCADE
- XYZ PDFs
- ...?



PORTFOLIO TOPIC “PHYSICS AT THE TERASCALE”



Antragsskizze für ein Portfoliothema

PHYSIK AN DER TERASKALA

der Helmholtz-Zentren

Deutsches Elektronen Synchrotron (DESY) und

Karlsruher Institut für Technologie (KIT)

mit den vorgesehenen Partnern

Rheinisch-Westfälische Technische
Hochschule Aachen

Rheinische Friedrich-Wilhelms-Universität
Bonn

Technische Universität Dresden

Justus-Liebig-Universität Gießen

Universität Hamburg

Johannes Gutenberg-Universität Mainz

Universität Regensburg

Julius-Maximilians-Universität Würzburg

Humboldt-Universität zu Berlin

Technische Universität Dortmund

Albert-Ludwigs-Universität Freiburg

Georg-August-Universität Göttingen

Ruprecht-Karls-Universität Heidelberg

Ludwig-Maximilians-Universität München

Universität Siegen

Bergische Universität Wuppertal

und dem Max-Planck-Institut für Physik München.

Start 1. Juli 2012

Koordinierender Sprecher: Prof. Dr. Joachim Mnich (DESY)

- > Structural proposal taken over.
- > Promised potential for quick organisation of resources (manpower and money) for upcoming topics.
- > Details not yet fixed here.



SIDE REMARK: PHENO CENTRE

