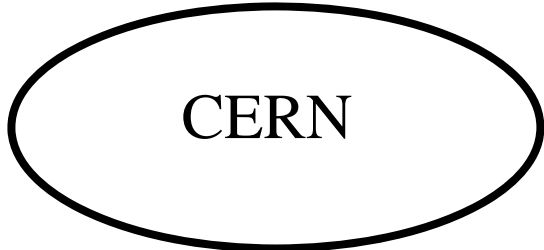




- Marie Curie Research Training Network
- for Monte Carlo event generator
 - development
 - validation and tuning
- Approved for four years from 1st Jan 2007





CERN

Mike Seymour Lars Sonnenschein
Alberto Ribon Andrzej Siodmok
Peter Skands



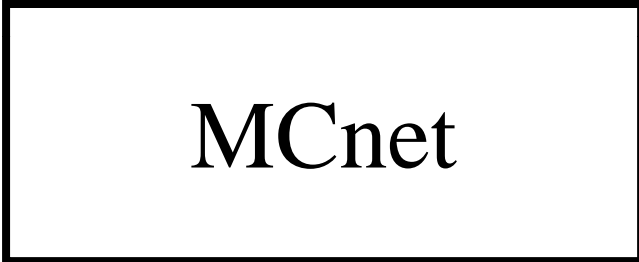
Durham
(incl. Cambridge)

Peter Richardson Steffen Schumann
Frank Krauss Jan Winter
Bryan Webber Martyn Gigg
Seyi Latunde-Dada David Grellscheid
Sasha Sherstnev Keith Hamilton
Jonathan Tully Frank Siegert
Tanju Gleisberg Marek Schoenherr
Stefan Hoeche

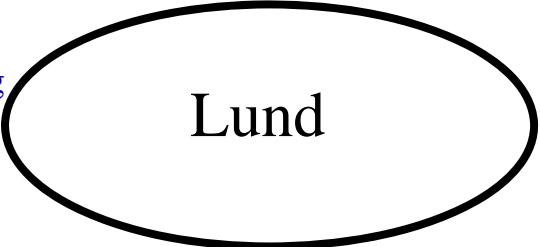


Userlink

Andy Buckley
Paula Eerola Jon Butterworth
Beate Heinemann Emily Nurse
Ian Hinchliffe Patrick Robbe
James Monk Peter Skands
Filip Moortgat Ben Waugh
Steve Mrenna Mike Whalley
Paolo Nason Matthew Wing



MCnet



Lund

Leif Lönnblad
Torbjörn Sjöstrand
Hendrik Hoeth
Nils Lavesson
Richard Corke
Christopher Flensburg

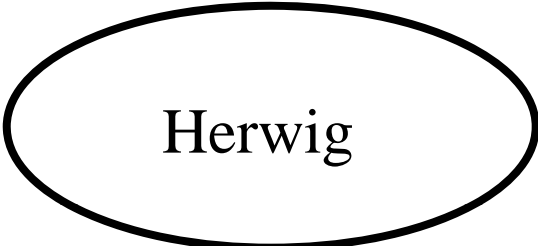


Karlsruhe
(incl. Krakow)

Stefan Gieseke
Simon Plaetzer
Manuel Baehr
Luca D'Errico

External Advisors

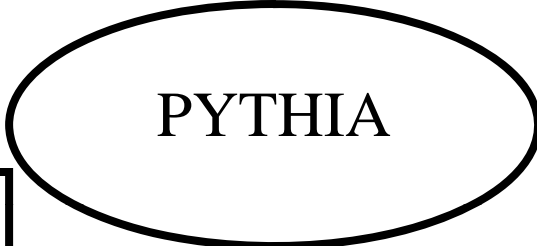
Mark Gibbs
Paolo Nason
Filip Moortgat
Beate Heinemann



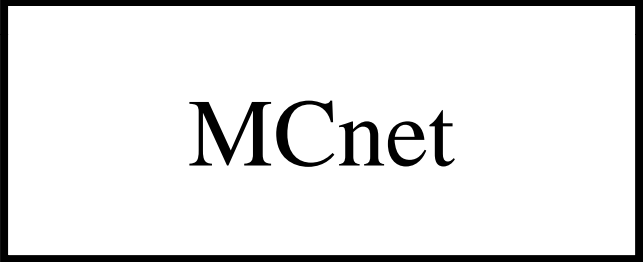
Peter Richardson
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Jon Butterworth
Lars Sonnenschein
Andy Buckley
James Monk
Emily Nurse
Ben Waugh
Mike Whalley
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Marek Schoenherr

MCnet objectives

Training:

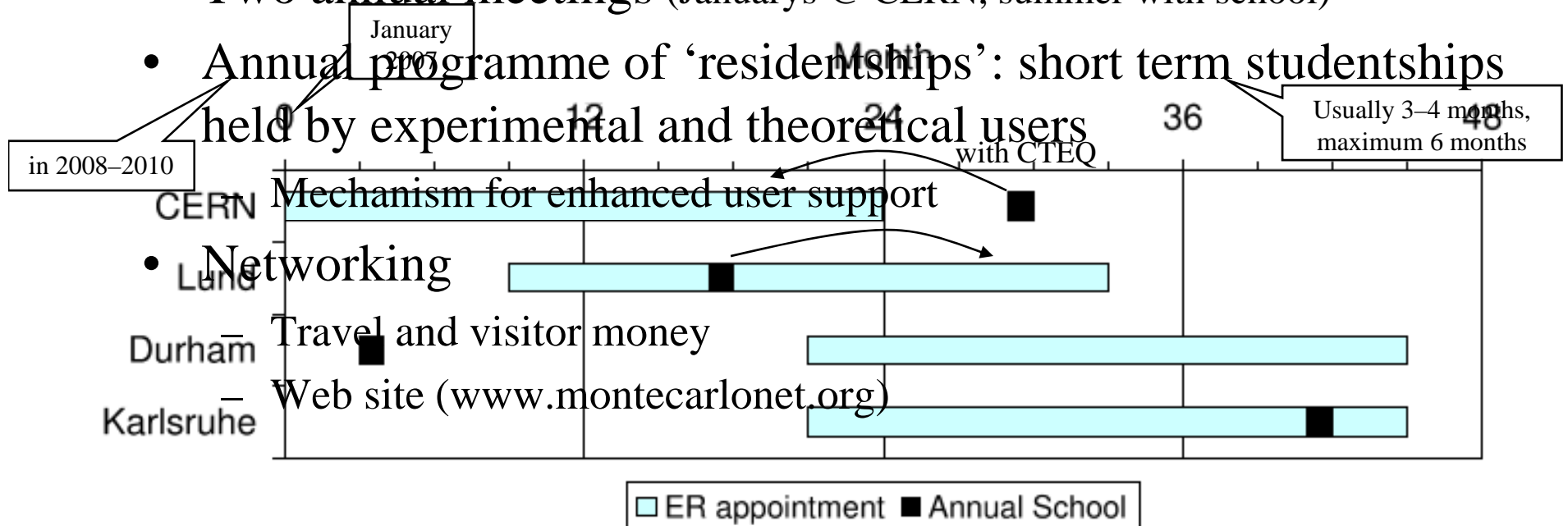
- To train a large section of the user base in the physics and techniques of event generators
- To train the next generation of event generator developers

Through Research:

- To develop the next generation of event generators intended for use throughout the lifetimes of the LHC and ILC experiments
- To play a central role in the analysis of early LHC data and the discovery of new particles and interactions there
- To extract the maximum potential from existing data to constrain the modeling of the data from the LHC and other future experiments.

MCnet main activities

- Four postdoc positions
- Two joint studentships (Karlsruhe–Durham, Durham–UCL)
- Annual School (YETI-like)
- Two annual meetings (Januarys @ CERN, summer with school)
- Annual programme of ‘residentships’: short term studentships held by experimental and theoretical users



2008 CTEQ - MCnet Summer School on QCD Phenomenology and Monte Carlo Event Generators

15th school of the Coordinated Theoretical-Experimental Project on QCD (CTEQ) and 2nd school of the MCnet Marie Curie Research Training Network



August 8-16 2008, Debrecen, Hungary

Lectures:

- Jet Physics
- Heavy Quarks
- Standard Model
- Event Generators
- Introduction to QCD
- Event Generators in Use
- Deep Inelastic Scattering
- Underlying Event Physics
- Parton Distribution Functions
- Hands-On Computer Sessions
- Vector Boson/Higgs Production
- Monte Carlo in Medical Research
- Matrix Element Matching Methods

A combination of broad lectures on QCD theory, phenomenology and analysis and a practical approach to event generator physics and techniques, with hands-on sessions and talks on using them in real analyses

Bursaries are available for participants from Less Favoured Regions and New Member States of the EU and others in financial need. Applications are particularly encouraged from women and other under-represented sections of the community.

Local Organizer: Zoltan Trocsanyi

Website:

www.cteq-mcnet.org

Sponsored by:

University of Debrecen
US National Science Foundation
Deutsches Elektronen-Synchrotron
Hungarian Scientific Research Fund
Fermi National Accelerator Laboratory
EU Marie Curie Actions: Human Resources and Mobility

MCnet opportunities

2008:

- CTEQ-MCnet school
- Short-term studentships: for th. and exptl. students to spend 3-6 months with MC authors in:

- CERN
- Durham/Cambridge
- Karlsruhe
- Lund
- UCL

on a project of their choice

- Next closing date:
 - June 30th

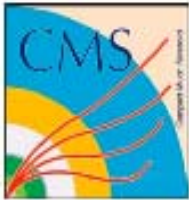
Double parton scattering studies with Pythia 8 and Herwig++

Florian Bechtel (Hamburg / Lund)
HERA-LHC workshop, May 27th 2008



Universität Hamburg





A study on AlpGen and Sherpa in Z+jets events

Piergiulio Lenzi
Università di Firenze & INFN

HERA-LHC workshop
CERN
27-05-2008

MCnet in figures

- Budget: 1.8Meuro
- Annual schools: 4 (~ 50 – 80 students each)
- Postdoc positions: 4
- Long-term studentships: 2
- Short-term studentships: 33 @ 4 months each
- Visitor budget: 84keuro
- Travel budget: 96keuro
- Start date: 1st January 2007
- Next School: August 2008, Debrecen (Hungary) with CTEQ
- Residencies: Next deadline: June 2008
for period September 2008 – February 2009