

## School on **Parton Distribution Functions** (including a PDF4LHC workshop on Friday, October 23)

# PHYSICS AT THE TERASCALE

## Helmholtz Alliance

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 +++

## 20-23 October 2009 DESY, Hamburg

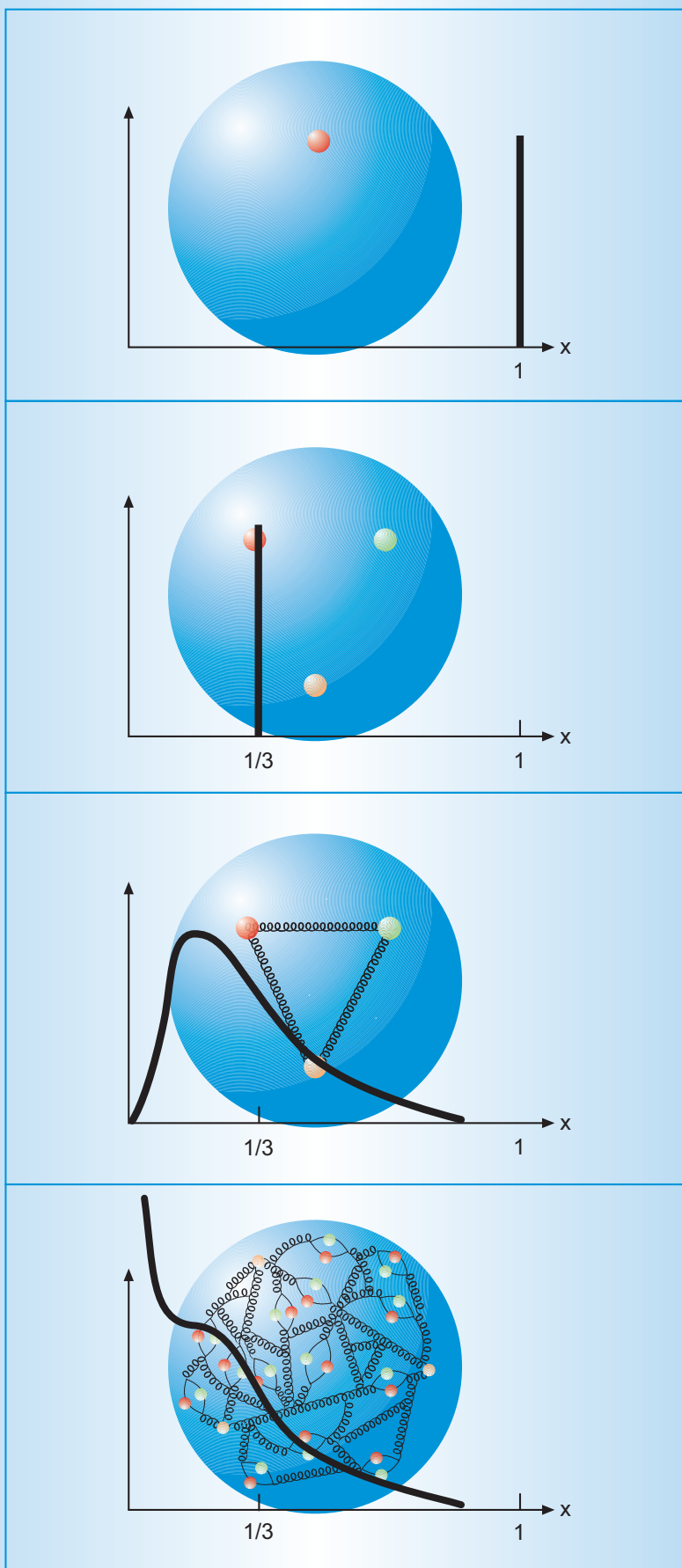
### Topics:

- Basics of QCD
- Deep-inelastic scattering and the structure of the proton
- PDF fits
- Predictions for the LHC
- Global PDF fitting activities
- PDF error evaluation
- PDF libraries

The PDF school covers hard scattering reactions at colliders, both from the theoretical and the experimental side. Emphasis is put on the current information on parton distributions (PDFs) and their impact on predictions and measurements of cross sections at the Terascale.

The school consists of lectures targeted at Ph.D. students and young post-docs. In addition, practical exercises on the usage of PDFs, PDF error evaluation and on related issues will help to deepen the understanding of the lecture contents.

The final day of the school is devoted to a meeting of the PDF4LHC workshop at which the latest developments concerning PDFs at the Large Hadron Collider will be discussed. The initial three days of the school will prepare the participants for the understanding of these discussions.



Organising Committee: J. Blümlein (DESY), A. Glazov (DESY), S.-O. Moch (DESY), T. Schörner-Sadenius (DESY)

The registration fee will be 50 Euros. For further information and in order to apply see

<http://www.terascale.de/pdf2009>