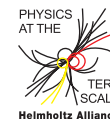


Welcome to the Terascale MC School 2015!

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 Regensburg +++ Universität Rostock +++ Universität Siegen +++ Julius-Maximilians-Universität Würzburg +++ Bergische Universität Wuppertal +++

Monte Carlo School 2015

13-17 April 2015

DESY, Hamburg

Lectures:

- Introduction (QCD, collinear splitting, general parton shower, Monte Carlo techniques, hadronisation, underlying events,...)
- Resummation
- Theory uncertainties
- NLO and higher-order calculations
- Parton shower matching at NLO
- Transverse momentum dependence and p_T distribution of high mass systems

During the hands-on tutorial you will learn how Monte Carlo methods can be applied and write a small program to evolve a parton density (forward evolution) using Sudakov form factors to finally obtain the p_T -spectrum of Higgs boson.

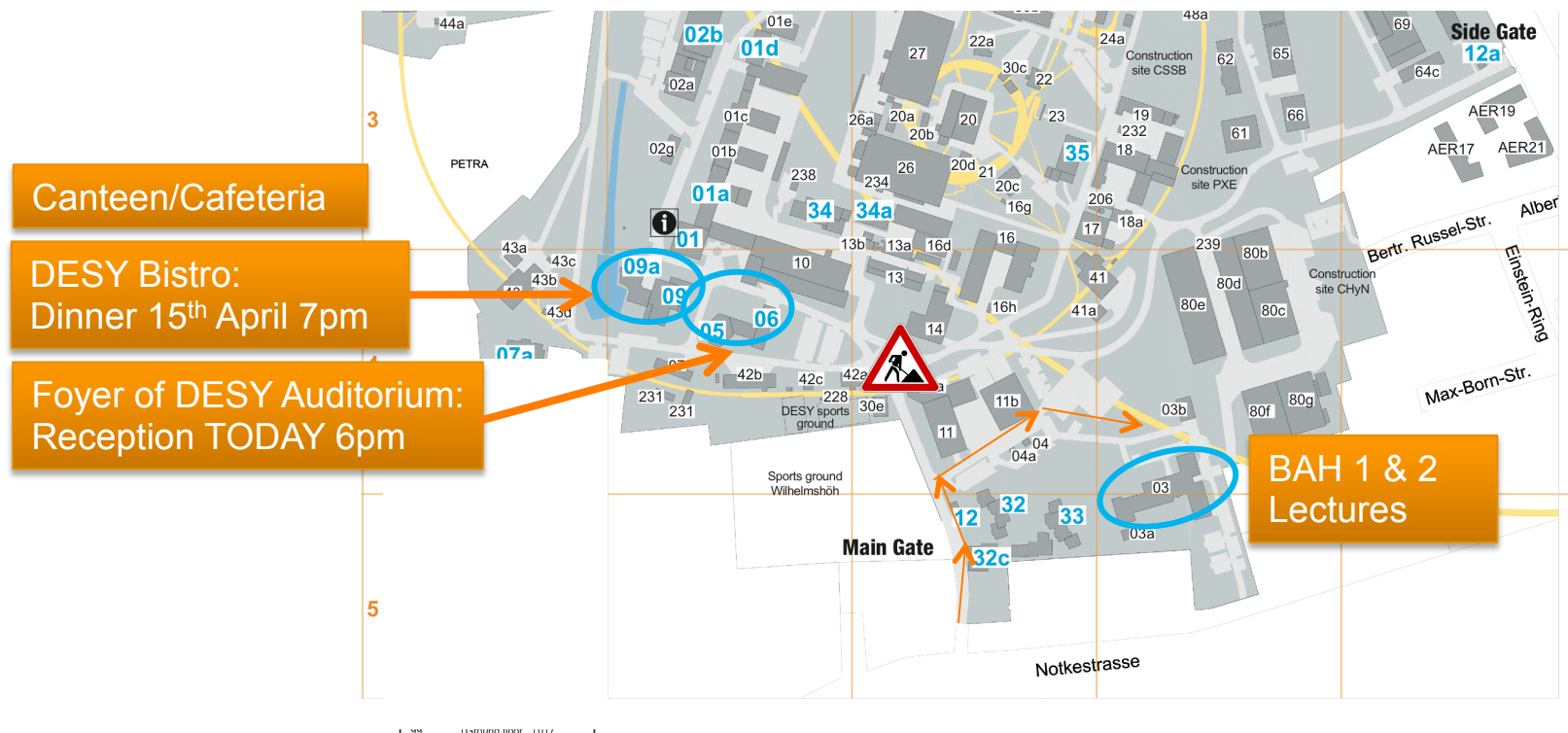
Registration fee: 50 Euro
Registration deadline: 10 April 2015

www.terascale.de/mc2015



Where to go

The DESY Site and venues for the MC school April 13-17 2015



Program

Monday	Tuesday	Wednesday	Thursday	Friday
9h	Monte Carlo Techniques	Resummation	NLO and higher order calculations	Transverse momentum dependence
	Coffee break	Coffee break	Coffee break	Coffee break
11h	Monte Carlo Techniques	Theory uncertainties	Parton shower matching at NLO	MC uncertainties in experimental analysis
12:30h	Lunch break	Lunch break	Lunch break	Tutorial wrap up
14h	Introduction	Tutorial	Tutorial	
	Coffee break	Coffee break	Coffee break	
16h	Introduction	Tutorial	Tutorial	
	Computing set-up			

18h Reception
Foyer DESY Auditorium

19h Dinner
DESY Bistro



Internet & Computing

We set up a special WLAN for the school, please use this one:

- > Name: terascale
- > WPA/WPA2-PSK: chhHzN44

School-accounts on the NAF:

- > You will all be provided with a login name to work on the German NAF on special prepared login nodes – more this afternoon in the computing setup session.



Enjoy!!!



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