

## BULLETIN # 2

# 12th International Conference on B-Physics at Hadron Machines (BEAUTY 2009)

7th-11th September 2009

Institute of Physics,  
Heidelberg University, Germany

Conference web site: <http://beauty2009.physi.uni-heidelberg.de>

Conference E-mail: [beauty2009@physi.uni-heidelberg.de](mailto:beauty2009@physi.uni-heidelberg.de)

Emergency phone: +49-151-51370874 (mobile)

This is the second bulletin of the 12th International Conference on B-Physics at Hadron Machines (BEAUTY 2009) which will be held from **September 7th - 11th 2009** at the [Institute of Physics \(Physikalisches Institut\)](#), Heidelberg University, Germany. The bulletin details the scientific programme, outlines the social programme and gives travel information to Heidelberg.

### Conference Venue and On-site Registration

The conference is held in the main auditorium of the Institute of Physics (Physikalisches Institut), located at the Philosopher's Walk (Philosophenweg 12), in walking distance from the city centre.

The conference registration desk will be located at the main entrance of the institute and will open on Monday morning, September 7<sup>th</sup>, at 9:00. The conference starts on Monday at 11:00. Coffee/tea will be served starting at 10:30.

Upon registration participants will receive their conference material such as a badge, programmes, list of participants, and useful information about the town. During the conference the registration desk will usually be manned and there will be a notice board for announcements and communications for conference delegates.

**On-site payment:** Payment by credit card or cash will be accepted upon your arrival in Heidelberg. However the late payment fee will be charged.

## Conference Secretary and Institute Contacts:

**Conference Secretary:** Christine Weidinger

**Address:** Institute of Physics, Philosophenweg 12, 69120 Heidelberg, Germany

**e-mail:** [beauty2009@physi.uni-heidelberg.de](mailto:beauty2009@physi.uni-heidelberg.de)

**Tel.:** +49 6221 549222

**Fax:** +49 6221 549262

## Getting to Heidelberg

**By plane:** If travelling by plane, the nearest airport is Frankfurt (FRA). From Frankfurt airport to Heidelberg, you can either take the [Lufthansa Airport Shuttle](#) (reservation is mandatory) or the train. In both cases it takes about 60 min. Please, consult our web pages for detailed time tables. Low budget airlines (Ryan Air) serve [Frankfurt-Hahn](#) and [Baden-Airpark](#). From both airports Heidelberg is easy to reach by regular coach services.

**By train:** You can use the [travel connection finder](#) of **Deutsche Bahn** to plan your trip to Heidelberg main train station.

**By car:** Please note that there is no parking possibility for conference participants in the institute.

## Getting to the Institute of Physics

The institute is located at the Philosophenweg 12, on the right side of the Neckar, opposite to the Bismarkplatz and the old town (Altstadt) – click [Google Maps](#) for more information. All conference hotels are in walking distance from the institute. To cross the Neckar use the Theodor-Heuss-Brücke.



To reach the institute from the main station, use tram line 5 (direction Bismarkplatz) and get-off at the stop (H) “Brückenstrasse”.

## **Weather in Heidelberg**

The beginning of September can still be very warm in Heidelberg with maximum temperatures in the high twenties. The evenings and nights however, are already fresh. Although we hope that there will be no rain during the conference week participants, should foresee rain clothes.

## **Presentations**

Electronic display of presentations is essential (PowerPoint, OpenOffice, PDF). Speakers must visit the registration desk well in advance of the session in which they are scheduled to speak and provide a copy of their talk. Presentations will be copied to the conference PC from which they will be displayed. We advise the speakers to try the correct display of the slides **before** giving the presentation. Speakers are not allowed to bring their own laptop to the stage for display of their presentations.

Note that the time allocated to each presentation **includes** time for questions, and speakers should allocate as follows: 5 minutes for a 40 min presentation, 4 minutes for a 25 or 30 min presentation and 3 minutes for a 20 min presentation.

## **Scientific Programme**

See detailed programme table at the end of the bulletin.

## **Social Programme and Banquet**

The social programme of BEAUTY 2009 includes a welcome barbeque, a conference concert together with a reception, an excursion and the conference banquet. All costs are included in the conference fee.

- Monday 7<sup>th</sup>, 18:15: Welcome barbeque in the institute garden.
- Tuesday 8<sup>th</sup>, 19:00: Concert and reception in the “Alte Aula” of the University. The concert with music from Irving Schlein is dedicated to the memory of Professor Peter Schlein.
- Wednesday 9<sup>th</sup>:  
Afternoon – Conference excursion: [Visit of Speyer](#) and of the [Castle of Heidelberg](#). Busses will leave at 13:30 to Speyer. There will be a guided tour through the Romanesque cathedral and through the town. With the Abbey of Cluny in ruins, the Cathedral of Speyer remains the largest Romanesque church. The cathedral was added in 1981 to the UNESCO World Heritage List of culturally important sites. Busses will return to Heidelberg at around 17:15 and the excursion will be concluded by a guided tour through the Castle of Heidelberg at 18:15.

Thursday 10<sup>th</sup>, 19:00: Reception and conference banquet in “Palais Prinz Carl”.

Friday 11<sup>th</sup>, 16:00: Farewell.

### **Lunch Arrangements**

Lunch is included in the conference fee and will be served in the institute garden or, in case of rain, in the “Fakultätssaal”.

### **Proceedings**

The proceedings will be published as open access online proceedings ([Proceedings of Science](#)). Papers cannot be accepted if they have been published elsewhere. Instructions for submission of proceedings will be given during the conference.

### **E-mail and Laptop Service**

There will be wireless network connection everywhere in the institute building. A limited number of PCs will be available in the institute for participants to read their e-mail. We will also provide a few Ethernet and power plugs.

### **In Case of Problems**

In case you have problems while travelling to Heidelberg or with your hotel and you think we can help, please call +49-151-51370874, the conference emergency phone. We will try to help you.

### **BEAUTY 2009 Sponsors**

- Heidelberg University and the Institute of Physics
- Heidelberg Graduate School of Fundamental Physics
- The European Physical Journal (EPJ)
- transtec – IT & Solutions
- iseg high voltage
- CAEN Nuclear Physics
- W-IE-NE-R Plein&Baus Elektronik

# Scientific Programme

<b>Monday</b>		
<b>09:00 - 11:00</b>	Registration	
<b>10:30 - 11:00</b>	<i>Coffee</i>	
<b>CKM Angles &amp; <math>\gamma</math> Determination</b> <i>Chairperson: Kevin Pitts</i>		
<b>11:00 - 11:15</b>	Welcome	
<b>11:15 - 11:40</b>	Kenkichi Miyabayashi (Nara)	Measurements of CKM Angles
<b>11:40 - 12:05</b>	Diego Tonelli (FNAL)	Charmless B Decays at CDF
<b>11:40 - 12:05</b>	Sebastian Jäger (TU München/Sussex)	Theoretical Overview of $b \rightarrow s$ Hadronic Decays
<b>12:30 - 14:00</b>	<i>Lunch</i>	
<b>14:00 - 14:25</b>	Laurence Carson (Glasgow)	Charmless B Decays at LHCb
<b>14:25 - 14:50</b>	Stefania Ricciardi (RAL)	Tree Level $\gamma$ Determination at LHCb
<b>14:50 - 15:15</b>	Andrew Powell (Oxford)	Strong Phase Measurements – Towards $\gamma$ at CLEO-c
<b><math>B_s</math> Mixing &amp; Phase</b> <i>Chairperson: Gudrun Hiller</i>		
<b>15:15 - 15:40</b>	Patricia Ball (Durham)	Theoretical Overview of $B_s \rightarrow J/\Psi\phi$ Mixing and CPV
<b>15:40 - 16:10</b>	<i>Coffee</i>	
<b>16:10 - 16:40</b>	Karen Gibson (Pittsburgh)	CP Violation in $B_s \rightarrow J/\Psi\phi$ at the Tevatron
<b>16:40 - 17:10</b>	Iain Bertram (Lancaster)	$\Delta m_s, \Delta \Gamma_s$ at the Tevatron
<b>17:10 - 17:35</b>	Alastair Dewhurst (Lancaster)	$B_s \rightarrow J/\Psi \phi$ with ATLAS/CMS
<b>17:35 - 18:00</b>	Olivier Leroy (Marseille)	$B_s \rightarrow J/\Psi\phi$ and $B_s \rightarrow \phi\phi$ at LHCb
<b>18:00 Welcome Barbecue</b>		

<b>Tuesday</b>		
<b>Charm and <math>\tau</math> Physics, Chairperson Jörg Marks</b>		
<b>08:45 – 09:10</b>	Alex Petrov (Wayne State University)	Theoretical Status of Charm Mixing, CPV and Mixing Parameters
<b>09:10 – 09:35</b>	Nicola Neri (Pisa)	Charm Mixing and CPV from the B Factories
<b>09:35 – 09:55</b>	Javier Magnin (CBPF)	Charm Physics at LHCb
<b>09:55 – 10:20</b>	Yasuhiro Okada (KEK)	Theoretical Status of LFV and Rare $\tau$ Decays
<b>10:20 – 10 :50</b>	<i>Coffee</i>	
<b>10:50 – 11:15</b>	Kenji Inami (Nagoya University)	Rare $\tau$ Decays from the B Factories
<b>Commissioning – LHC Experiments</b> <i>Chairperson: Maria Smizanska</i>		
<b>11 :15 – 11:45</b>	Mario Pelliccioni (Torino)	CMS Detector Commissioning Results with Cosmics
<b>11:45 – 12:15</b>	Alex Cerri (CERN)	ATLAS Detector Commissioning Results with Cosmics and First Beam
<b>12:15 – 12:45</b>	Malcolm John (Oxford)	LHCb Detector Commissioning Results with Cosmics and First Beam
<b>12:45 – 13:55</b>	<i>Lunch</i>	
<b>b Production and Cross Sections at LHC</b> <i>Chairperson: Guy Wilkinson</i>		
<b>13:55 – 14:25</b>	Andrea Dainese (INFN Padova)	ALICE Commissioning Status and Prospects to Measure Charmonium, Bottonium and $b\bar{b}$ Production
<b>14:25 – 14:50</b>	Kevin Pitts (Illinois University)	Heavy Flavor Production at the Tevatron
<b>14:50 – 15:10</b>	Yuanning Gao (Tsinghua University)	LHCb Production: Onia, Cross Section, Correlations
<b>15:10 – 15:40</b>	Valery Andreev (UCLA)	CMS/ATLAS Production: Onia, Cross Section, Correlations
<b>15:40 – 16:10</b>	<i>Coffee</i>	
<b>CKM Elements and Unitarity Triangle Sides</b> <i>Chairperson: Christoph Schwanda</i>		
<b>16:10 – 16:35</b>	Zoltan Ligeti (LBNL).	Theoretical Status of $V_{xb}$
<b>16:35 – 17 :00</b>	Jonas Rademacker (Bristol)	Leptonic Decays with CLEO-c
<b>17:00 – 17:25</b>	Patrick Spradlin (Oxford)	Semileptonic Decays with CLEO-c
<b>17:25 – 17:50</b>	Jochen Dingfelder (Freiburg)	Measurements of the CKM Triangle Sides
<b>17:50 – 18:15</b>	Karim Trabelsi (KEK)	Determination of CKM Parameters
<b>19:00 Concert and Reception</b>		

<b>Wednesday</b>		
<b>LHC First Data - Plans</b> <i>Chairperson: Clara Matteuzzi</i>		
<b>09:00 - 09:30</b>	Zoltan Gece (Purdue University)	Early CMS B Physics with the First 1 - 50 pb <sup>-1</sup>
<b>09:30 - 10:00</b>	Dimitrios Sampsonidis (Thessaloniki)	Early ATLAS B physics with the first 10 - 100 pb <sup>-1</sup>
<b>10:00 - 10:30</b>	Raluca-Anca Muresan (EPFL Lausanne)	LHCb first physics with the first 10 - 20 pb <sup>-1</sup>
<b>10:30 - 11:00</b>	<i>Coffee</i>	
<b>Tevatron, BES &amp; Beyond the Standard Model</b> <i>Chairperson: Michael Schmelling</i>		
<b>11:00 - 11:30</b>	Michal Kreps (Karlsruhe)	Tevatron Experimental Issues at High Luminosities
<b>11:30 - 11:55</b>	Wolfgang Kuehn (Giessen)	BES Status and Results
<b>11:55 - 12:20</b>	Mike Arov (Louisiana Tech)	Top Physics at the Tevatron
<b>12:20 - 12:45</b>	Gilad Perez (Weizmann Inst. of Science)	Theoretical Status of BSM Flavor Physics
<b>12:45 - 13:30</b>	<i>Lunch</i>	
<b>13:30 Conference Excursion</b>		
<i>Visit of the Cathedral of Speyer</i> <i>Guided Tour of Speyer</i> <i>Visit of the Castle of Heidelberg</i>		

Thursday		
<b>Spectroscopy, Chairperson: Alessandro Cerri</b>		
09:00 - 09:25	Gabriele Simi (University of Maryland)	Bottomonium Spectroscopy at the B Factories
09:25 - 09:50	Kam Seth (Northwestern Univer.)	Bottomonium Spectroscopy at CLEO
09:50 - 10:15	Michal Kreps (Karlsruhe)	Charmonium Spectroscopy (X,Y,Z) at the B Factories
10:15 - 10:40	Jean Wicht (KEK)	Y(5S) and non BB Y(4S) Decays at Belle
10:40 - 11:10	<i>Coffee</i>	
11:10 - 11:30	Jim Russ (Carnegie Mellon)	J/Ψ and Y Polarization at the Tevatron
11:30 - 11:55	Martin Heck (Karlsruhe)	Spectroscopy (X,Y,Z) at the Tevatron
<b>B Hadron Lifetimes and Properties, Chairperson: Michal Kreps</b>		
11:55 - 12:15	Simone Donati (INFN/Pisa)	B Baryons at CDF
12:15 - 12:35	Peter Ratoff (Lancaster)	B Baryons at D0
12:35 - 13:05	Heather Gerberich (University of Illinois)	B Hadron Properties at the Tevatron: Lifetime, B <sub>c</sub> , excited states
13:05 - 14:00	<i>Lunch</i>	
14:00 - 14:25	Alexander Khodjamirian (Siegen)	Prospects/Status - Non-perturbative QCD Methods for Flavor Physics
14:25 - 14:50	Weina Ji (Lund)	B Hadron Properties at the LHC: Lifetimes, Polarization, Masses of B <sub>s</sub> , B <sub>c</sub> and Λ <sub>b</sub>
<b>Rare Decays, Chairperson: Achille Stocchi</b>		
14:50 - 15:15	Gudrun Hiller (Dortmund)	Theoretical Status of Rare B Decays with Muons
15:15 - 15:45	Michael Morello (FNAL)	FCNC at the Tevatron
15:45 - 16:15	<i>Coffee</i>	
16:15 - 16:40	Mikihiko Nakao (KEK)	Rare B Decays at the B Factories
16:40 - 17:05	Diego Martinez-Santos (Santiago deCompostella)	B <sub>s</sub> → μμ at the LHC
17:05 - 17:30	William Reece (Imperial College)	B <sub>s</sub> → K*μμ at LHCb
17:30 - 17:55	Ivan Belyaev (NIKHEF)	LHCb Radiative Decays
<b>19:00 Conference Dinner</b>		



<b>Friday</b>		
<b>Detector Status – LHC Experiments</b> <i>Chairperson: Samim Erhan</i>		
<b>09:00 - 09:25</b>	Andrea Bocci (Pisa)	Expected Performance of the CMS Inner Detector
<b>09:25 - 09:50</b>	Sofia Chouridou (Santa Cruz)	Expected Performance of the ATLAS Inner Detector
<b>09:50 - 10:10</b>	David Hutchcroft (Liverpool)	Commissioning of the LHCb Particle ID and Tracking
<b>10:10 - 10:30</b>	Leandro De Paula (Rio de Janeiro)	Commissioning and Plans for the LHCb Trigger
<b>10:30 - 11:00</b>	<i>Coffee</i>	
<b>Upgrades LHC Experiments &amp; Future e<sup>+</sup>e<sup>-</sup> Projects</b> <i>Chairperson: Ulrich Uwer</i>		
<b>11:00 - 11:25</b>	Fabrizio Parodi	Upgrade of the Tracking and Trigger System at ATLAS & CMS
<b>11:25 - 11:55</b>	Paula Collins (CERN)	LHCb Upgrade – Physics Case and High Luminosity
<b>11:55 - 12:15</b>	Achille Stocchi (LAL-Orsay)	E <sup>+</sup> e <sup>-</sup> B Factory at 10 <sup>36</sup> - Physics Case
<b>12:15 - 12:45</b>	Christoph Schwanda (Vienna)	SuperB and SuperBELLE
<b>12:45 - 14:00</b>	<i>Lunch</i>	
<b>Conference Summary</b> <i>Chairperson: Neville Harnew</i>		
<b>14:00 - 14:45</b>	Marco Ciuchini (Rome)	Theory Vision
<b>14:45 - 15:30</b>	Kevin Pitts (Illinois University)	Conference Summary
<b>15:30 - 15:45</b>	<b>END</b>	
<b>15:45 - 16:15</b>	<i>Coffee</i>	