

Workshop

Probing Hadron Structure from Hard Exclusive Processes

Excellence Cluster *Universe* – MPP – Helmholtz Institute Mainz

IPP-Lecture Hall
Science Campus Garching

München (Garching), Germany
November 9th – 11th, 2009

Final Bulletin

IMPORTANT!

Registration at the web site of the Workshop

http://www.universe-cluster.de/Hard_Exclusive_Processes_2009

is absolutely obligatory for all participants

Announcement

The workshop “Probing Hadron Structure from Hard Exclusive Processes” ([HexProc2009](#)) will be held at the Excellence Cluster - *Origin and Structure of the Universe*, Garching b. München, Germany from November 9th until November 11th, 2009. It is organized jointly by the Excellence Cluster *Universe*, the Max Planck Institute for Physics in Munich and the Helmholtz Institute in Mainz.

The workshop will focus on a specific technique for studying the structure of particles held together by the strong force - hadrons - using hard exclusive processes as a probe. The use of exclusive processes (well-defined initial and final states) allows to pin down the reaction under study and allows for dedicated comparisons with theoretical predictions.

Furthermore, hard reactions will be studied, i.e. reactions where significant transverse momentum is exchanged, in order to focus on structures at small distance scales where perturbative QCD calculations are applicable. The workshop will review the existing status of the field. The focus will however be on what can be achieved in future experimental undertakings, such as at the FAIR facility or at the Electron Ion Collider.

The first session of ([HexProc2009](#)) will commence on Monday morning at 9:00 a.m. November 9th. The last session of the Workshop will end on Wednesday noon.

Registration will take place on Monday November 9th in the morning starting at 8:30 a.m.

Estimated departure is Wednesday, November 11th at 14:00.

Presentations

Presentations are by beamer only! Talks must be uploaded to the conference web site using Indico or may be transferred to the local computer on site by using USB memory sticks before the start of the resp. session. We support PDF and windows-based MS-Office (2007) formats. Please note that it is not possible to connect personal laptops for presentations. All talks will be displayed from the central computer and will be made available on the website.

Scientific Advisory Committee

Allen CALDWELL	(MPP München)
Stephan PAUL	(TU München and Excellence Cluster <i>Universe</i>)
Lars SCHMITT	(GSI Darmstadt)
Mark STRIKMAN	(Pennsylvania State University)
Wolfram WEISE	(TU München)

Local Organizing Committee

Allen CALDWELL	(MPP München)
Karin FRANK	(TU München)
Jan FRIEDRICH	(TU München)
Bernhard KETZER	(TU München)
Ulrike OLLINGER	(Excellence Cluster <i>Universe</i>)
Stephan PAUL	(TU München)
Rosa-Anna POLZER	(Excellence Cluster <i>Universe</i>)
Alexandra WOLFELSPERGER	(Excellence Cluster <i>Universe</i>)

Scientific Program

	Monday, 09 November 2009
08:30 – 09:00	Registration
09:00 - 09:30	Summary of hard exclusive processes at HERA by Aharon LEVY
09:40 - 10:10	On the 5-quark component of the nucleon: a bridge between low- and high-energy physics by Dmitri DIAKONOV
10:20 - 10:40	coffee break
10:50 - 11:20	Physics with J/psi by Henri KOWALSKI
11:30 - 12:00	Chiral dynamics in hard exclusive processes by Maxim POLYAKOV
12:10 - 12:40	Hard exclusive processes at COMPASS by Andrzej SANDACZ
12:50 – 13:50	Lunch
14:00 - 14:30	The perturbative QCD picture of fixed-angle exclusive amplitudes by George STERMAN
14:40 - 15:10	Selected results for hard exclusive processes at HERMES by Klaus RITH

- 15:20 – 15:50 coffee break
- 15:50 - 16:20 **Introducing Color Transparency**
by Gerald MILLER
- 16:30 - 17:00 **Overview of the forward physics at EIC**
by Elke ASCHENAUER
- 17:10 – 18:00 Discussion
- 18:00 – 19:30 Reception

Tuesday, 10 November 2009

- 09:00 - 09:30 **GPDs**
by Mark VANDERHAEGHEN
- 09:40 - 10:30 **Hard exclusive processes at Jlab EIC - theoretical perspective**
by Christian WEISS
- 10:40 - 11:20 coffee break
- 11:20 - 12:20 **GPD @COMPASS**
by Nicole D'HOSE
- 12:20 - 14:00 Lunch
- 14:00 - 14:30 **e-N collider @ FAIR**
by Dietrich V. HARRACH
- 14:40 - 15:10 **Experimental Studies of short-range correlations**
by Eli PIASETZKY
- 15:20 - 15:50 coffee break
- 15:50 - 16:20 **Status of nonrelativistic microscopic nuclear structure calculations**
by Claudio CIOFI DEGLI ATTI
- 16:30 - 17:00 **Future directions of the studies of SRC**
by Leonid FRANKFURT
- 17:00 - 18:00 Discussion
- 19:30 Arrival for Dinner at Hackerhaus
- 20:00 – 23:00 Dinner at Hackerhaus

Wednesday, 11 November 2009

- 09:00 - 09:30 **Detector designs for EIC**
by Uwe Schneekloth
- 09:40 - 10:10 **Hard exclusive Reactions in PANDA**
by Frank MAAS
- 10:20 – 10:50 coffee break
- 11:00 - 11:30 **Forward physics with Charm**
by Daniel KAPLAN
- 11:40 - 12:10 **Study of color transparency and GPDs using hard hadron induced reactions**
by Mark STRIKMAN
- 12:20 - 14:00 Lunch

Contact information

Workshop Probing Hadron Structure from Hard Exclusive Processes

Excellence Cluster *Universe*

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Homepage: http://www.universe-cluster.de/Hard_Exclusive_Processes_2009

Address:

IPP-Lecture Hall – Building D2
Boltzmannstr. 2 – 85748 Garching

The workshop takes place in the lecture hall of the Max-Planck Institute for Plasma Physics (IPP) on the campus of the Max-Planck Society in Garching. Additional space for subgroup meetings is available in the basement of the Cluster building also situated on the Max-Planck campus, 3 minutes across the campus.

Calendar

August 21st 2009	1 st Bulletin: announcement, general information, list of the Organizing Committees. Registration and abstract submission start
October 1-14, 2009	Deadline for hotel reservations
October 17th, 2009	2 nd Bulletin: preliminary program, list of speakers and participants
November 4th, 2009	Deadline for registration
November 8th, 2009	Arrival day
November 9th, 2009	Registration, beginning of the workshop and reception
November 10th, 2009	Evening: workshop dinner
November 11th, 2009	End of the workshop

Registration fee

A registration fee of 190 € should be paid in cash upon arrival (at registration). Registered students will pay a fee of 150 € (student identification requested on registration). It covers coffee breaks, lunches, reception and workshop dinner.

Format of the workshop

The conference talks start every morning at 9:00 and end around 12:30. After a lunch break talks resume at 14:00 and end around 18:00. The conference ends on Wednesday at 12:30 followed by a lunch.

Talks are typically of 40 minutes length. All times include 10 minutes of discussions.

Internet

WLAN is available in the lecture hall and also at the cluster building. Access info will be made available at the registration desk.

Lunch

A buffet lunch is served (9th – 11th) on the 2nd floor of building D2.

Accommodation

We have made a pre-booking of rooms in München and Garching.

The code for reservations is: "H_E_P_2009".

Every participant is responsible for her/his own booking/alteration/cancellation of accommodation.

Please note that due to a large industrial fair taking place at the same time, availability of rooms is reduced and prices are higher as usual.

In case you have not fixed your accommodation yet, please contact the hotels as soon as possible.

Hotel König Ludwig II Bürgerplatz 3 85748 Garching Phone: +49 (0) 89 / 3 20 50 46 Fax: +49 (0) 89 / 3 29 15 10 Email: hotel@hkl.de Internet: http://www.hkl.de 12 single rooms 79 – 99 € Deadline: 14.10.2009	Hotel am Park Bürgermeister-Ammon-Str.2 85748 Garching Phone: + 49 (0) 89 / 3 20 40 84 Fax: + 49 (0) 89 / 3 29 47 89 11 Email: info@hotel-am-park.com Internet: www.hotel-am-park.com 10 single rooms 59 – 115 € Deadline: 30.10.2009
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<p>Hotel Alt Schwabing Siegfriedstr. 9 80803 München Phone: +49 (0) 89 / 38 38 78 0 Fax: +49 (0) 89 / 33 67 03 Email: info@hotel-altschwabing.de Internet: http://www.hotel-altschwabing.de</p> <p>4 single rooms 75 € Deadline: 14.10.2009</p>	<p>Hotel Hauser Schellingstr. 11 80799 München Phone: +49 (0) 89 / 28 6675 - 0 Fax: +49 (0) 89 / 28 66 75 99 Email: info@hotel-hauser.de Internet: http://www.hotel-hauser.de</p> <p>10 single rooms 85 € Deadline: 01.10.2009</p>
<p>Hotel Prinz Hochstr. 45 81541 München Phone: +49 89 / 44 14 08 0 Fax: +49 89 / 44 14 08 333 Email: contact@hotel-prinz.de Internet: http://www.hotel-prinz.de</p> <p>20 single rooms 98 – 148 € Deadline: 14.10.2009</p>	<p>Tulip Inn München Schwabing Domagkstrasse 26 80807 München Tel: +49 (0) 89 36001 850 Fax: +49 (0) 89 36001 9215 Email: reservations@tulipinnMünchenschwabing.com Internet: www.tulipinnMünchenschwabing.com</p> <p>15 single rooms 143 € Deadline: 01.10.2009</p>

Transportation

München is the third largest town of Germany with about 1.3 Million inhabitants. It is situated at an altitude of 550 m above sea level in a flat area around 50 km north of the Bavarian Alps. It was founded about 850 years ago and is the capital of the state of Bavaria.

The location of the conference site is on the Science Campus Garching, close to Garching, a small town north of München. The Lecture Hall is on the Max-Planck-Campus. Access is next to the southern exit of the subway. Subway U6 connects the Campus directly with downtown, Marienplatz. From here suburban lines S8 and S1 provide a direct connection to München International Airport).

Access to the MPI-site is granted for all registered participants.

People arriving **by airplane** should take public transport into town (suburban trains or a special airport bus both arriving at the central train station). From there the subway line U6 takes you to Garching Science Campus. People connecting directly to München airport can either take a taxi (price ~ 30 €) or take S8 to Ismaning station and from there the bus 230 to the Science Campus Garching. The Airport offers direct connections to most cities in the world, including Japan, China or the US.

People arriving **by train** at the central station can take any suburban train line to reach Marienplatz from where U6 leaves to Garching Forschungsinstitute (note: not every train continues all the way through).

People arriving **by car** should take the highway A9, use exit ‘Garching Nord’ and follow straight to Science Campus. Parking can be found next to the subway entrance (paying) or behind the Science Buildings (no costs). There is no permission to enter the Max-Planck-Area by car.

Everybody who enters München by car must obtain an **environmental badge** prior to the visit! Please find requested information about the badge at http://www.umwelt-plakette.de/foreign_cars.php

Social program

The social program for participants to the workshop includes

- A reception on Monday evening, November 9th in the foyer of the IPP lecture hall
- A banquet on Tuesday evening, November 10th at Hackerhaus München, Sendlinger Str. 14, 80331 München

Weather

At this time of the year, weather could be pleasant but days can also be misty and accompanied by some rain. Temperatures vary between 3⁰C and 9⁰C.



recommended!

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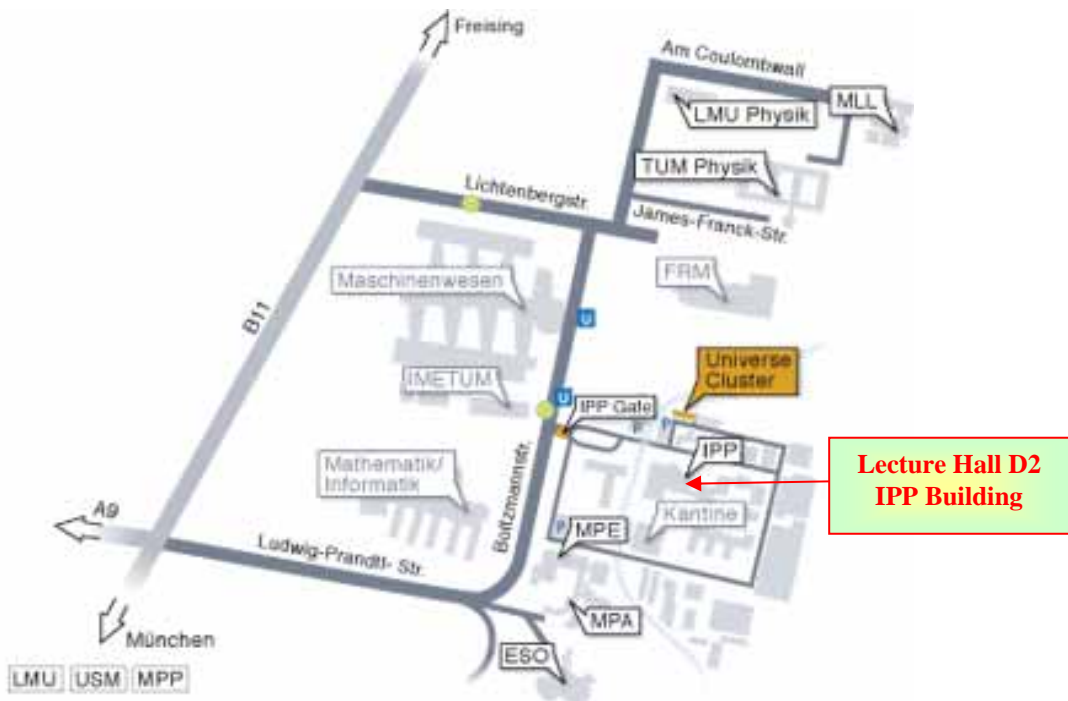
is absolutely obligatory for all participants

Additional Information

Road map



Workshop Location at IPP



Links

- Deutsche Bahn (railway) <http://www.bahn.de>
- Airport München <http://www.munich-airport.de>
- Routenplaner <http://www.de.map24.com/>
- Public transport München <http://www.mvv-muenchen.de/en/home/index.html>
(Time schedules, tickets and urban rail network maps)
- Garching <http://www.garching.de>
- München <http://www.muenchen.de>
- Hackerhaus <http://www.hackerhaus.de>

We are looking forward to welcoming you at the workshop!

Your local organizing team