

## SCHEDULE

### Tuesday

- 08:30-09:30 Registration at  
Albert-Ueberle-Str. 3-5,  
2nd floor, room 260
- 09:30-12:30 Morning lectures
- 12:30-13:30 Lunch, welcome address
- 14:00-17:00 Afternoon lectures
- 17:30-18:30 Additional lecture
- 18:30- ... General welcome party

### Wednesday

- 09:30-12:30 Morning lectures
- 12:30-13:30 Lunch
- 14:00-17:00 Afternoon lectures

### Thursday

- 09:30-12:30 Morning lectures
- 12:30-13:30 Lunch
- 14:00-17:00 Afternoon lectures
- 17:30-18:30 Hans Jensen Invited Lecture  
Philosophenweg 12,  
»Großer Hörsaal
- 18:30- ... d-fine barbecue

### Friday

- 09:30-12:30 Morning lectures
- 12:30-13:30 Lunch
- 14:00-17:00 Afternoon lectures

## PUBLISHED BY

The Central Office of the  
Heidelberg Graduate School of Fundamental Physics,  
Albert-Ueberle-Str. 3-5, 69120 Heidelberg,  
all rights reserved

## MAP



- 1 .... Institute of Theoretical Physics, Seminar Room, Philosophenweg 19
- 2 ..... Institute of Theoretical Physics, Library, Philosophenweg 16
- 3 ..... »Physikalisches Institut, »Kleiner Hörsaal, Philosophenweg 12
- 4 ..... »Physikalisches Institut, »Großer Hörsaal, Philosophenweg 12
- 5 ..... »Physikalisches Institut, Technical Workshop, Philosophenweg 12
- 6 ..... »Physikalisches Institut, »Neuer Hörsaal, Albert-Ueberle-Str. 7
- 7 ..... »Physikalisches Institut, Technical Workshop, Philosophenweg 12
- 8 ..... Institute of Theoretical Astrophysics, Albert-Ueberle-Str. 2
- 9 ..... Albert-Ueberle-Str. 1
- 10 ..... Dean's Office, Dept. of Physics and Astronomy, Albert-Ueberle-Str. 3-5
- 11 ..... Central Office, HGSP, Albert-Ueberle-Str. 3-5
- 12 ..... CIP Pool of the Institute of Psychology, Hauptstr. 47-51

## SUPPORTED BY



MAX PLANCK INSTITUTE  
FÜR KERNPHYSIK



d-fine

PHOTOGRAPHY: ANNE GOLDBACH, COMPOSITION AND GRAPHIC DESIGN: ANKE HEINZELMANN



HGSP

Heidelberg Graduate School  
of Fundamental Physics



# XXIV HEIDELBERG PHYSICS GRADUATE DAYS 06. April – 09. April 2010

at the Department of Physics and Astronomy  
of the University of Heidelberg

## Programme



## REGISTRATION

---

All participants are requested to register at the conference office on Tuesday morning between 8:30 and 9:30 a.m. The address is: Albert-Ueberle-Str. 3-5, 2nd floor, room 260 of Mrs. Buchhaupt (+49 6221 54 92 85). If you have not paid the conference fee, you should do it in cash then.

At this office, you can obtain further information about the event. There will also be a short welcome address by the organisers on Tuesday during the lunch break, where you can ask further questions.

## PROGRAMME

---

### Morning Courses (9:30–12:30)

#### »NEUTRON SCATTERING: „WHERE ATOMS ARE AND WHAT ATOMS DO“«

Niels Christensen (Risø National Laboratory and TU Denmark, Copenhagen)  
*Room: A-Ue 3-5 SR*

#### »INTRODUCTION TO COMPUTATIONAL ASTROPHYSICS«

Fritz Roepke (Max Planck Institute for Astrophysics, Garching)  
*Room: Phil 12 SR*

#### »TRANSPORT THROUGH NANOSTRUCTURES IN THE QUANTUM-TO-CLASSICAL CROSSOVER«

Stefan Rotter (Technical University, Vienna)  
*Room: Phil 12 kHS*

#### »MODERN TECHNIQUES IN STATISTICS AND DATA ANALYSIS«

Helge Voss (Max Planck Institute for Nuclear Physics, Heidelberg)  
*Room: Phil 12 gHS*

#### »SCIENTIFIC WRITING«

Sita Schanne (University of Heidelberg)  
*Room: A-Ue 3-5 FS*

### Afternoon Courses (14:00–17:00)

#### »MANY-BODY QUANTUM PHYSICS WITH COLD ATOMS«

Sebastian Diehl (University of Innsbruck)  
*Room: Phil 19 SR*

#### »NEW PHYSICS AT THE LHC«

Tilman Plehn (University of Heidelberg)  
*Room: Phil 12 kHS*

#### »BIOLOGICAL BACKGROUND AND THEORETICAL MODELS OF BRAIN FUNCTIONS«

Heinz Horner (University of Heidelberg)  
*Room: A-Ue 3-5 FS*

#### »FROM TINY GALAXIES TO HUGE CLUSTERS - A GUIDED TOUR THROUGH THE LOCAL UNIVERSE«

Thorsten Lisker (University of Heidelberg)  
*Room: Phil 12 SR*

#### »NEUTRINO ASTRONOMY«

Ulrich Katz (University of Erlangen-Nuremberg)  
*Room: A-Ue 3-5 SR*

#### »A PRACTICAL COURSE TEACHING C++«

Jens Schöbel (Crytek, Frankfurt am Main)  
*Room: Phil 12 gHS*

---

### Additional Lecture (Tuesday, 17:30–18:30)

#### »MAKING SCIENCE UNDERSTANDABLE«

Hannelore Hämmerle (Max Planck Institute for Astrophysics, Garching)  
*Room: Phil 12 gHS*

---

### Hans Jensen Invited Lecture (Thursday, 17:30–18:30)

#### »USING ULTRACOLD ATOMS TO LEARN ABOUT DENSE NUCLEAR AND QCD MATTER«

Gordon Baym (University of Illinois)  
*Room: Phil 12 gHS*

## BREAKS AND EVENTS

---

Coffee breaks (around 11:00 and 15:30)

Lunch break (12:30–13:30)

General welcome party (Tuesday, 18:30–...)

d-fine barbecue (Thursday, 18:30–...)

## LEGEND

---

**Phil 19 SR:** Seminar room  
Institute of Theoretical Physics,  
Philosophenweg 19

**Phil 12 gHS:** »Großer Hörsaal«  
(Large lecture theatre),  
1st floor, »Physikalisches Institut«,  
Philosophenweg 12

**Phil 12 kHS:** »Kleiner Hörsaal«  
(Small lecture theatre),  
2nd floor, »Physikalisches Institut«,  
Philosophenweg 12

**Phil 12 SR:** Seminar room  
3rd floor,  
»Physikalisches Institut«,  
Philosophenweg 12

**A-Ue 3-5 FS:** »Fakultätssaal«  
3rd floor,  
»Physikalisches Institut«,  
Albert-Ueberle-Str. 3-5

**A-Ue 3-5 SR:** Seminar room  
1st floor,  
»Physikalisches Institut«,  
Albert-Ueberle-Str. 3-5