

## SCHEDULE

### MONDAY

- 08:30–09:30 Registration at the foyer of the  
»Physikalisches Institut«, INF 226
- 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

### TUESDAY

- 09:30–12:30 Morning lectures
- 12:30–13:30 Lunch
- 14:00–17:00 Afternoon lectures
- 17:15– ... Student Representatives' Welcome

### 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
- 18:30– ... d-fine barbecue

### FRIDAY

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

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## MAP



- 1 ..... »Physikalisches Institut«, INF 226
- 2 ..... »Kirchhoff-Institut für Physik«, INF 227
- 3 ..... »Institut für Umweltphysik«, INF 229
- 4 ..... »Hörsäle Physik«, INF 308
- 5 ..... »Mensa Area A«, INF 304

PHOTO: PHOTOCASE / JÖRG SCHWALENBERGER, COMPOSITION AND GRAPHIC DESIGN: ANKE HEINZELMANN



UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386

# 37th HEIDELBERG PHYSICS GRADUATE DAYS

October 10–14, 2016

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY

## PROGRAMME

SUPPORTED BY:



FURTHER  
INFORMATION:



## PROGRAMME

### MORNING COURSES (9:30–12:30)

BRIDGING SCALES IN NEUROSCIENCE: FROM BIOPHYSICS TO POPULATIONS

**Eilif Muller**, EPFL – Blue Brain Project, Geneva

*INF 226 K2/3*

AN INTRODUCTION TO GRAVITATIONAL-WAVE ASTROPHYSICS

**Pau Amaro-Seoane**, Albert Einstein Institute, Potsdam and

**Anna Sippel**, Max Planck Institute for Astronomy

*INF 227 SR 1.403/404*

ANOMALIES IN QUANTUM FIELD THEORY

**Marco Serone**, SISSA, Trieste

*INF 226 K1*

FIELD COMPUTATION AND MAGNETIC MEASUREMENTS FOR SUPERCONDUCTING ACCELERATOR MAGNETS

**Stephan Russenschuck** and **René Flükiger**, CERN, Geneva

*INF 227 SR 3.403*

STUDYING MANY-BODY SYSTEMS WITH ULTRACOLD MATTER – FROM AMO OVER SOLID STATE TO HIGH ENERGY PHYSICS

**Fred Jendrzejewski**, Heidelberg University

*INF 227 SR 3.404*

PRESENTING RESEARCH RESULTS

**Ute Leidig**, Heidelberg University

*INF 227 SR 3.402*

### AFTERNOON COURSES (14:00–17:00)

PROBING THE DARK UNIVERSE: THE INTERFACE BETWEEN OBSERVATIONAL AND THEORETICAL COSMOLOGY

**David Bacon**, Institute of Cosmology and Gravitation, Portsmouth

*INF 226 K2/3*

$e^+e^-$  PHYSICS AT THE ENERGY FRONTIER: GLORIOUS PAST, EXCITING FUTURE

**Felix Sefkow**, DESY, Hamburg

*INF 227 SR 3.403*

FOUNDATIONS OF NUMERICAL RELATIVITY

**Thomas Baumgarte**, Bowdoin College, Maine

*INF 227 SR 3.404*

LOW TEMPERATURE DETECTORS AND NEUTRINO PHYSICS

**Loredana Gastaldo**, Heidelberg University

*INF 227 SR 3.402*

INTRODUCTION TO PYTHON FOR PHYSICISTS

**Thomas Erben**, University of Bonn

*INF 227 SR 1.401*

FROM DATA AND DIGITALIZATION TO MODEL BUILDING AND VALUATION IN FINANCE

**Team d-fine**, d-fine, Frankfurt am Main

*INF 226 K1*

### ADDITIONAL LECTURE (MONDAY, 17:30–18:30)

ZEISS – PRODUCTS, PERFORMANCE SPECIFICATIONS AND THE PEOPLE WHO MAKE IT POSSIBLE

**Andreas Dorsel**, ZEISS Semiconductor Manufacturing Technology

*INF 227 HS 2*

### STUDENT REPRESENTATIVES' WELCOME (TUESDAY, 17:15–...)

**Alda Arias**, Maximilian Prüfer

*INF 226 K 2/3*

### HANS JENSEN INVITED LECTURE (THURSDAY, 17:30–18:30)

FROM EINSTEIN TO GRAVITATIONAL WAVES AND BEYOND

**Barry Barish**, California Institute of Technology

*INF 227 HS 1*

## BREAKS AND EVENTS

### COFFEE BREAKS (AROUND 11:00 AND 15:30)

FOYER, INF 226

### LUNCH BREAK (12:30–13:30)

»MENSA AREA A«, INF 304

### GENERAL WELCOME PARTY (MONDAY, 18:30–...)

FOYER, INF 226

### D-FINE BARBECUE (THURSDAY, 18:30–...)

FOYER, INF 226

## LEGEND

### INF 226 K1

»Konferenz 1«  
room 00.101  
»Physikalisches Institut«  
Ground floor

### INF 226 K2/3

»Konferenz 2/3«  
room 00.102/103  
»Physikalisches Institut«  
Ground floor

### INF 227 HS1

»Großer Hörsaal«  
Kirchhoff Institute for Physics  
Ground floor

### INF 227 HS2

»Kleiner Hörsaal«  
Kirchhoff Institute for Physics  
Ground floor

### INF 227 1.401

»CIP-POOL«  
Kirchhoff Institute for Physics  
1st floor

### INF 227 SR 1.403/404

Seminar rooms  
Kirchhoff Institute for Physics  
1st floor

### INF 227 SR 3.402/403/404

Seminar rooms  
Kirchhoff Institute for Physics  
3rd floor

## REGISTRATION

All participants are requested to register at the conference office on Monday morning between 8:30 and 9:30.

This office will be positioned in the foyer of the »Physikalisches Institut«, INF 226. 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 Monday during the lunch break, where you can ask further questions.