

## 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 E«, INF 304

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UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386

# 39th HEIDELBERG PHYSICS GRADUATE DAYS

October 9–13, 2017

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY

## PROGRAMME

SUPPORTED BY:



d-fine

FURTHER  
INFORMATION:



## PROGRAMME

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### MORNING COURSES (9:30–12:30)

QUANTUM NONLOCALITY AND GENERAL PROBABILISTIC THEORIES

**Markus Müller**, IQOQI, Institute for Quantum Optics and Quantum Information, Vienna

*INF 227 SR 1.403/404*

ASTEROSEISMOLOGY

**Saskia Hekker**, Max Planck Institute for Solar System Research, Göttingen

*INF 226 K1*

PRECISION PHYSICS WITH ANTIMATTER

**Christian Smorra, Andreas Mooser**, CERN, Geneva

*INF 226 K2/3*

FUNDAMENTAL QUANTUM STRUCTURE OF SPACETIME

**Astrid Eichhorn**, Heidelberg University

*INF 227 SR 3.402*

PRESENTING RESEARCH RESULTS

**Ute Leidig**, Heidelberg University

*INF 227 SR 3.403*

### AFTERNOON COURSES (14:00–17:00)

THE THEORY OF COSMIC INFLATION

**Luca Santoni**, Utrecht University

*INF 226 K1*

SUPERCONDUCTING QUANTUM COMPUTERS:  
EXPERIMENTAL BASICS AND STATE OF THE ART

**Jürgen Lisenfeld**, Karlsruhe Institute of Technology (KIT)

*INF 227 SR 1.403/404*

THE SECRET LIVES OF CLOUDS: THE ROLE OF CLOUDS FOR  
CLIMATE, WEATHER AND AIR QUALITY

**Thomas Leisner**, Karlsruhe Institute of Technology (KIT),

**Ulrich Platt**, Heidelberg University

*INF 227 SR 3.402*

ACTIVE MATTER: PATTERN FORMATION AND COLLECTIVE  
PHENOMENA IN BIOLOGICAL SYSTEMS

**Falko Ziebert**, Heidelberg University

*INF 227 SR 3.403*

DETECTORS FOR PARTICLE TRACKING AND IDENTIFICATION

**Silvia Masciocchi**, GSI, Darmstadt

*INF 227 SR 3.404*

DATA SCIENCE IN RISK, FINANCE AND BEYOND

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

*INF 226 K2/3*

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

ENTERING THE NEXT DIMENSION IN DIGITAL INSPECTION

**Christof Reinhart**, Volume Graphics, Heidelberg

*INF 227 HS2*

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

**Arrianna Picotti, Janko Nauta**

*INF 226 K2/3*

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

GRAVITATIONAL WAVES, BLACK HOLES, DARK MATTER,  
AND THE EARLY UNIVERSE

**Marc Kamionkowski**, Johns Hopkins University, Baltimore

*INF 227 HS1*

## BREAKS AND EVENTS

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

*FOYER, INF 226*

### LUNCH BREAK (12:30–13:30)

*»MENSA AREA E«, INF 304*

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

*FOYER, INF 226*

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

*FOYER, INF 226*

## LEGEND

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### 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 SR 1.403/404

Seminar room  
Kirchhoff Institute for Physics  
1st floor

### INF 227 SR 3.402

Seminar room  
Kirchhoff Institute for Physics  
3rd floor

### INF 227 SR 3.403

Seminar room  
Kirchhoff Institute for Physics  
3rd floor

### INF 227 SR 3.404

Seminar room  
Kirchhoff Institute for Physics  
3rd floor

## REGISTRATION

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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.