

## 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
- 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

## SUPPORTED BY:



d-fine

## FURTHER INFORMATION:



UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386

# 40th HEIDELBERG PHYSICS GRADUATE DAYS

April 9–13, 2018

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY

## PROGRAMME



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### MORNING COURSES (9:30–12:30)

#### COLLISION PHENOMENA AT ULTRA-LOW ENERGIES

**Jook Walraven**, University of Amsterdam

*INF 227 HS2*

#### CONFORMAL QUANTUM FIELD THEORY

**Karl-Henning Rehren**, Göttingen University

*INF 226 K1*

#### PHYSICS AND CHEMISTRY OF THE HEAVIEST ELEMENTS

**Michael Block, Christoph Düllmann, Sebastian Raeder**,

GSI and Johannes Gutenberg University Mainz

*INF 227 SR 1.403/404*

#### NUMERICAL METHODS FOR COSMOLOGY: FROM EARLY TO LATE TIMES

**Francesco Pace**, University of Manchester

*INF 226 K2/3*

#### ADVANCED TOPICS IN MODIFIED GRAVITY

**Lavinia Heisenberg**, ETH Zürich

*INF 227 SR 3.402*

#### MODERN SILICON SENSORS FOR PARTICLE PHYSICS EXPERIMENTS

**Ivan Peric**, Karlsruhe Institute of Technology (KIT)

*INF 227 SR 3.403/404*

### AFTERNOON COURSES (14:00–17:00)

#### PT-SYMMETRIC QUANTUM MECHANICS

**Carl Bender**, Washington University in St. Louis

*INF 227 HS2*

#### EXPLORING STRONG GRAVITY WITH ACCRETING BLACK HOLES

**Jason Dexter**, Max Planck Institute for Extraterrestrial Physics,

Garching

*INF 227 SR 1.403/404*

#### SEARCHING FOR NEW PHYSICS AT THE INTENSITY FRONTIER

**Niklaus Berger**, Johannes Gutenberg University Mainz

*INF 226 K1*

#### PHENOMENOLOGY OF NEUTRINO OSCILLATIONS

**Evgeny Akhmedov**, Max-Planck-Institut für Kernphysik

*INF 226 K2/3*

#### PHYSICS AND CHEMISTRY OF SMALL-SCALE AIR-SEA INTERACTIONS

**Bernd Jähne**, Interdisciplinary Center for Scientific Computing (IWR)

and Institute of Environmental Physics

*INF 227 SR 3.403/404*

#### ANALYZING PERSONAL POTENTIAL FOR YOUR CAREER

**Ute Leidig**, Heidelberg University

*INF 227 SR 3.402*

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

#### SHAPING THE FUTURE WITH SAP LEONARDO MACHINE LEARNING

**Klaus Schimmer, Engelbert Quack**, SAP SE, Walldorf

*INF 227 HS2*

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

*INF 226 K2/3*

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

#### SYMMETRY, TOPOLOGY AND ELECTRONIC PHASES OF MATTER

**Charles Kane**, University of Pennsylvania

*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 3.403/404

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.