

## SCHEDULE

### MONDAY

- 08:30–09:30 Registration at the desk of the building where your first lecture takes place
- 09:30–12:30 Morning lectures
- 12:30–14:00 Lunch break
- 14:00–17:00 Afternoon lectures
- 17:30–18:30 Additional lecture

### TUESDAY

- 09:30–12:30 Morning lectures
- 12:30–14:00 Lunch break
- 14:00–17:00 Afternoon lectures
- 17:15– ... Student representatives' welcome and information for new students

### WEDNESDAY

- 09:30–12:30 Morning lectures
- 12:30–14:00 Lunch break
- 14:00–17:00 Afternoon lectures
- 17:30–18:30 Hans Jensen Invited Lecture

### THURSDAY

- 09:30–12:30 Morning lectures
- 12:30–14:00 Lunch break
- 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 Umwelphysik«, INF 229
- 4 ..... »Hörsäle Physik«, INF 308
- 5 ..... »Mensa«, INF 304

PHOTO: DANIEL WOHLLEBEN; COMPOSITION AND GRAPHIC DESIGN: ANKE HEINZELMANN

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UNIVERSITÄT  
HEIDELBERG  
ZUKUNFT  
SEIT 1386

# 48th HEIDELBERG PHYSICS GRADUATE DAYS

April 11–14, 2022

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY

## PROGRAMME

### SUPPORTED BY:



STRUCTURES  
CLUSTER OF  
EXCELLENCE



Center for  
Quantum Dynamics



MAX-PLANCK-INSTITUT  
FÜR KERNPHYSIK

d fine



Baden-Württemberg

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im Rahmen der Nachhaltigkeitsfinanzierung der Projekte der Exzellenzinitiative II

## PROGRAMME

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### MORNING COURSES (9:30–12:30)

SUPERCONDUCTIVITY FROM REPULSIVE INTERACTIONS  
**Laura Classen**, Max Planck Institute for Solid State Research,  
Stuttgart *INF 227 SR 1.403/404*

AT THE INTERSECTION OF MICROENGINEERING AND  
MAGNETIC RESONANCE: CHALLENGES AND OPPORTUNITIES  
**Neil MacKinnon**, KIT - Karlsruhe Institute of Technology  
*INF 226 K1/2/3*

DENSE STRONGLY INTERACTING MATTER  
**Fabian Rennecke**, Giessen University  
*INF 227 SR 3.403/404*

GOING BEYOND THE STANDARD MODEL OF PARTICLE PHYSICS  
**Florian Goertz**, Max Planck Institute for Nuclear Physics  
*INF 227 HS2*

UNDERSTANDING THE CARBON CYCLE AND SETTING THE  
SCIENTIFIC FUNDAMENT FOR EFFICIENT CLIMATE ACTION  
**Sanam Vardag**, Heidelberg University  
*INF 227 HS1*

### AFTERNOON COURSES (14:00–17:00)

PARTICLE PHYSICS FROM COSMIC BACKGROUNDS  
**Tommi Alanne**, University of Liverpool  
*INF 226 K1/2/3*

NEW TRENDS IN CALORIMETRY FOR PARTICLE PHYSICS  
**Lucia Masetti**, Johannes Gutenberg University Mainz  
*INF 227 SR 3.403/404*

INTRODUCTION TO QUARK AND LEPTON FLAVOUR PHYSICS  
**Stephanie Hansmann-Menzemer**, Heidelberg University  
*INF 227 SR 1.403/404*

THE PHYSICS AND OBSERVABILITY OF EXOPLANET ATMOSPHERES  
**Thomas Mikal-Evans**, Max Planck Institute for Astronomy  
*INF 227 HS2*

ULTRACOLD QUANTUM MATTER:  
WHAT CAN YOU DO WITH ATOMS AND NEUTRONS  
**Lauriane Chomaz and Skyler Degenkolb**,  
Heidelberg University *INF 227 HS1*

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### ADDITIONAL LECTURE

(MONDAY, 17:30-18:30)

THE PHYSICS OF ENTREPRENEURSHIP  
**Sahill Poddar**, Parafin, San Francisco  
*ONLINE ONLY*

### STUDENT REPRESENTATIVES' WELCOME

(TUESDAY, 17:15–...)  
*INF 226 K1/2/3*

### HANS JENSEN INVITED LECTURE

(WEDNESDAY, 17:30–18:30)

OBSERVING THE GLOBAL CARBON CYCLE FROM THE  
VANTAGE POINT IN SPACE: FROM METHANE POINT SOURCES  
TO PHOTOSYNTHETIC CARBON DIOXIDE UPTAKE  
**Christian Frankenberg**, Caltech  
*INF 308 HS1 AND ONLINE*

## BREAKS

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

*MENSA AREA E, INF 304*

ACCESS CONTROL: NAME TAG

### LUNCH BREAK (12:30–13:30)

*MENSA AREA A/B, INF 304*

ACCESS CONTROL: COVPASS CHECK AND MEAL TAG

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## LEGEND

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<b>INF 226 K1/2/3</b>	»Konferenz 1/2/3« Room 00.101–00.103 »Physikalisches Institut« Ground floor
<b>INF 227 SR 1.403/404</b>	Seminar room Kirchhoff Institute for Physics 1st floor
<b>INF 227 SR 3.403/404</b>	Seminar room Kirchhoff Institute for Physics 3rd floor
<b>INF 227 HS1</b>	»Großer Hörsaal« Kirchhoff Institute for Physics Ground floor
<b>INF 227 HS2</b>	»Kleiner Hörsaal« Kirchhoff Institute for Physics Ground floor
<b>INF 308 HS1</b>	»Hörsaalgebäude Physik« Ground floor

### REGISTRATION

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All participants are requested to register at the desk of the building where their first lecture takes place.

Bring proof of 3G (geimpft, genesen oder negativ getestet – vaccinated, recovered or tested negative) together with an ID document.

Please also bring a FFP2 mask.

For general questions, please come to the desk at INF 226.