



48th HEIDELBERG PHYSICS GRADUATE DAYS

APRIL 11 – 14, 2022

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY



UNIVERSITÄT
HEIDELBERG

ZUKUNFT
SEIT 1386

Courses are conceived for advanced students in physics, in particular for doctoral or masters students. The goal of the lecture series is to expand the general knowledge of students and to deepen their understanding of special topics and methods. Each course runs every day for four days either in a morning or afternoon slot.

MORNING COURSES MONDAY TO THURSDAY, 9:30–12:30

SUPERCONDUCTIVITY FROM REPULSIVE INTERACTIONS
Laura Classen, Max Planck Institute for Solid State Research, Stuttgart

AT THE INTERSECTION OF MICROENGINEERING AND MAGNETIC RESONANCE: CHALLENGES AND OPPORTUNITIES
Neil MacKinnon, KIT - Karlsruhe Institute of Technology

DENSE STRONGLY INTERACTING MATTER
Fabian Rennecke, Giessen University

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

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

AFTERNOON COURSES MONDAY TO THURSDAY, 14:00–17:00

PARTICLE PHYSICS FROM COSMIC BACKGROUNDS
Tommi Alanne, University of Liverpool

NEW TRENDS IN CALORIMETRY FOR PARTICLE PHYSICS
Lucia Masetti, Johannes Gutenberg University Mainz

INTRODUCTION TO QUARK AND LEPTON FLAVOUR PHYSICS
Stephanie Hansmann-Menzemer, Heidelberg University

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

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

ADDITIONAL LECTURE

MONDAY, APRIL 11, 2022, 17:30

THE PHYSICS OF ENTREPRENEURSHIP
Sahill Poddar, Parafin, San Francisco

For registration and further information, see <http://gsfp.physi.uni-heidelberg.de/graddays>

STUDENT REPRESENTATIVES' WELCOME

TUESDAY, APRIL 12, 2022, 17:15

HANS JENSEN INVITED LECTURE

WEDNESDAY, APRIL 13, 2022, 17:30

OBSERVING THE GLOBAL CARBON CYCLE FROM THE VANTAGE POINT IN SPACE: FROM METHANE POINT SOURCES TO PHOTOSYNTHETIC CARBON DIOXIDE UPTAKE
Christian Frankenberg, Caltech

 Please see our website for info on precautionary measures due to COVID-19



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STRUCTURES
CLUSTER OF
EXCELLENCE



Baden-Württemberg

MINISTERIUM FÜR WISSENSCHAFT, FORSCHUNG UND KUNST

Finanziert vom Ministerium für Wissenschaft, Forschung und Kunst Baden-Württemberg im Rahmen der Nachhaltigkeitsfinanzierung der Projekte der Exzellenzinitiative II



Center for
Quantum Dynamics



MAX-PLANCK-INSTITUT
FÜR KERNPHYSIK

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