HGSFP

36th HEIDELBERG PHYSICS GRADUATE DAYS APRIL 11 – 15, 2016

AT THE DEPARTMENT OF PHYSICS AND ASTRONOMY

UNIVERSITÄT HEIDELBERG
ZUKUNFT SEIT 1386

Courses are conceived for advanced students in physics, in particular for doctoral, masters or diploma 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 five days either in a morning or afternoon slot.

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

INTRODUCTION TO GAUGE/GRAVITY DUALITIES – FROM STRINGS AND BLACK HOLES TO CONDENSED MATTER SYSTEMS AND BACK
Martin Ammon, University of Jena

PLANET FORMATION
Bertram Bitsch, Lund University, Sweden

TOPOLOGICAL PHASES IN SOLIDS: EMERGENCE OF DIRAC, WEYL, AND MAJORANA FERMIONS
Stephan Rachel, TU Dresden

NEUTRINO PHYSICS: PHENOMENOLOGY AND THEORY
Werner Rodejohann, Max-Planck-Institut für Kernphysik

ANALYZING PERSONAL POTENTIAL FOR YOUR CAREER
Ute Leidig, Heidelberg University

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

DYNAMICS AND SPECTROSCOPY OF MOLECULAR SYSTEMS: FROM THE INFRARED TO THE X-RAY REGIME
Oliver Kühn, University of Rostock

GEOMETRICAL AND TOPOLOGICAL METHODS IN PHYSICS
Andreas Braun, University of Oxford

THE HIGGS AND BEYOND: DAWN OF A NEW ERA OF PARTICLE PHYSICS
Oleg Brandt, Martin Bauer, Heidelberg University

QUANTUM ELECTRODYNAMICS: BASIC FOUNDATIONS AND MODERN ISSUES IN THE PRESENCE OF INTENSE BACKGROUND ELECTROMAGNETIC FIELDS
Antonino Di Piazza, Max-Planck-Institut für Kernphysik

PHILOSOPHY OF PHYSICS
Norman Sieroka, ETH Zürich

ADDITIONAL LECTURE

MONDAY, APRIL 11, 2016, 17:30

DATA SCIENCE - A CAREER OPPORTUNITY IN CONSULTING?
Engelbert Quack and Helmut Linde, SAP SE, Walldorf

FOLLOWED BY A
GENERAL WELCOME PARTY

STUDENT REPRESENTATIVES' WELCOME

TUESDAY, APRIL 12, 2016, 17:15

HANS JENSEN INVITED LECTURE

THURSDAY, APRIL 14, 2016, 17:30

ENGINES OF STRUCTURE FORMATION IN THE UNIVERSE: FROM DARK MATTER TO ALTERNATIVE GRAVITY
Adi Nusser, Technion – Israel Institute of Technology
FOLLOWED BY THE **D-FINE BARBECUE**

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

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