



# 35th HEIDELBERG PHYSICS GRADUATE DAYS

OCTOBER 5–9, 2015

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

### BIOMOLECULAR SIMULATION

**Rebecca Wade, Frauke Gräter**, Heidelberg Institute for Theoretical Studies (HITS)

### SUPERCONDUCTIVITY AND SUPERCONDUCTING ELECTRONICS

**Rudolf Gross and Frank Deppe**, Walther-Meißner-Institute for Low Temperature Research and Technische Universität München

### COHERENT CONTROL OF ULTRAFAST DYNAMICS: FROM ATOMS TO SOLIDS

**Matthias Wollenhaupt**, University of Oldenburg

### EMPIRICAL INFERENCE AND LEARNING FROM DATA

**Michael Hirsch**, Max Planck Institute for Intelligent Systems, Tübingen

### IDEAS AND RESULTS OF THE MATHEMATICAL THEORY OF PHASE TRANSITIONS

**Manfred Salmhofer**, Heidelberg University

### PRESENTING RESEARCH RESULTS

**Ute Leidig**, Heidelberg University

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

### EXPLORING COLLECTIVE FEATURES OF QCD IN HEAVY ION COLLISIONS

**Raju Venugopalan**, Brookhaven National Laboratory, New York

### FINITE QUANTUM SYSTEMS – FROM SEMICONDUCTOR QUANTUM DOTS AND WIRES TO ULTRA-COLD ATOMIC QUANTUM GASES

**Stephanie Reimann, Andreas Wacker**, Lund University, Sweden

### STATISTICS FOR PARTICLE AND ASTROPARTICLE EXPERIMENTS

**Kyle Cranmer**, New York University

### ISOTOPES AND ISOTOPOLOGUES – FROM FUNDAMENTAL PHYSICS TO EVERYDAY APPLICATIONS

**Tobias Kluge**, Heidelberg University

### BEYOND THE STS-MYTH AND JARGON: HOW SCIENCE BUILDS ON SCIENTIFIC REVOLUTIONS, CONVERGENCE, K-RESOURCES, DYNAMICS, CORE-CONTEXTS AND FRONTIERS OF THEORY DEVELOPMENT

**Giridhari Lal Pandit**, University of Delhi

### WATERFALLS IN FINANCE AND ACCOUNTING FOR HEISENBERG

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

## STUDENT REPRESENTATIVES' WELCOME

TUESDAY, OCTOBER 6, 2015, 17:15

**Holger Jörg, Stephan Helmrich**

## ADDITIONAL LECTURE

WEDNESDAY, OCTOBER 7, 2015, 17:30

### LIGHT SOURCES FOR EUV-MICROLITHOGRAPHY

**Michael von Borstel**, TRUMPF Lasersystems for Semiconductor Manufacturing, Ditzingen

## FOLLOWED BY A

**GET-TOGETHER WITH BEER AND PRETZELS**

## HANS JENSEN INVITED LECTURE

THURSDAY, OCTOBER 8, 2015, 17:30

### NANOSCOPY WITH FOCUSED LIGHT

**Stefan Hell**, Max Planck Institute for Biophysical Chemistry, Göttingen

FOLLOWED BY THE **D-FINE BARBECUE**

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



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