



SPLIT SUMMER SCHOOL STSS2017

COURSE: SPACE AND TIME IN PHYSICS AND PHILOSOPHY

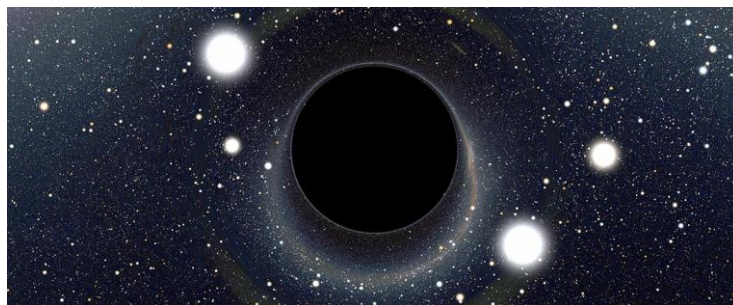
Contact person: Irena Bitunjac irena.bitunjac@pmfst.hr

phone: : +385 21 619 217

Web page: <http://split-summerschool.com>

Main topics:

- Critical assessment of the concepts of space and time in classical and modern physics
- Epistemological and methodological problems of science



Programme structure:

- 4-day course
- Lectures, seminars and workshops
- Philosophy 2h
- Classical electrodynamics, optics and thermodynamics 1h
- Classical mechanics 2h
- Theory of relativity 3h
- Quantum mechanics and electrodynamics 4h
- Quantum theory of gravitation 8h

Important dates:

Course dates: 04/07/2017 – 07/07/2017

Deadline for application: 15/06/2017

Payment due by: 20/06/2017

Confirmation of the course: 20/06/2017

Price of the course: 100 € (tax included)

Programme plan:

Day 1

- Theories of Space and Time from Aristotle to Einstein (Part I)
- Space and Time in Classical Physics and Relativity
- A Common Falacy in QM: About Delayed Choice Experiment and Retrocausality (Part I)
- Shape Space Quantum Physics
- Space and Time in Modern Cosmology

Programme lecturers:

- Vishnya Maudlin, Ph.D., Professor at New York University
- Franjo Sokolić, Ph.D., Professor at PMF Split
- Tomislav Živković, Ph.D., Professor, Institute Ruđer Bošković
- Detlef Dürr, Ph.D., Professor at Math. Inst. LMU, München
- Neven Bilić, Ph.D., Professor, Institute Ruđer Bošković

Day 2

- Theories of Space and Time from Aristotle to Einstein (Part II)
- A Common Falacy in QM: About Delayed Choice Experiment and Retrocausality (Part II)
- Does Non-Relativistic Quantum Theory Exist?
- Universe or Multiverse?

- Vishnya Maudlin, Ph.D., Professor at New York University
- Tomislav Živković, Ph.D., Professor, Institute Ruđer Bošković
- Tim Maudlin, Ph.D., Professor at New York University
- Marko Uršič Ph.D., Professor at Faculty of Philosophy, University of Ljubljana

Day 3

- On Evaporating Black Holes
- The Disappearance of Space and Time in Quantum Theories of Gravity
- Numerical Modelling in Magnetohydrodynamics and

- Tim Maudlin, Ph.D., Professor at New York University
- Christian Wüthrich, Ph.D., Professor at Universite de Geneve
- Dragan Poljak, Ph.D., Professor at FESB, University of Split



UNIVERSITY OF SPLIT
UNIVERSITAS STUDIORUM SPALATENSIS

SPLIT SUMMER SCHOOL STSS2017

Quantum Mechanics

Day 4

- What Becomes of a Casual Set?
- What We Know and What We Want to Know About

Quantum Gravity

- Emergent Spacetime in the Laboratory

-Christian Wüthrich, Ph.D., Professor at Universite de Geneve

- Ilya Shapiro, Ph.D., Professor at Universidade Federal de Juiz de Fora, MG, Brazil

-Neven Bilić, Ph.D., Professor, Institute Ruđer Bošković