

UNIVERSITY O F

UNIVERSITAS STUDIORUM SPALATENSIS

SPLIT SUMMER SCHOOL STSS2017

COURSE: SPACE AND TIME IN PHYSICS AND PHILOSOPHY

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http://www.unist.hr/split-summer-school-2017 Web page:

Main topics:

Critical assessment of the concepts of space and time in classical and modern physics

Epistemological and methodological problems of science

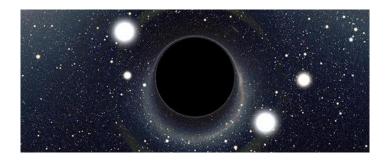
4-day course

Lectures, seminars and workshops

Philosophy

Classical electrodynamics, optics and thermodynamics

- Classical mechanics
- Theory of relativity
- Quantum mechanics and electrodynamics
- Quantum theory of gravitation



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

- 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

- Theories of Space and Time from Aristotle to Einstein (Part

- A Common Falacy in QM: About Delayed Choice Experiment and Retrocausality (Part II)

- Does Non-Relativistic Quantum Theory Exist?

- Universe or Multiverse?

Day 3

- On Evaporating Black Holes

- The Disappearance of Space and Time in Quantum Theories of Gravity

- Numerical Modelling in Magnetohydrodynamics and **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

Programme lecturers:

Dr. sc. Vishnya Maudlin, New York University

Prof. dr. sc. Franjo Sokolić, University of Split, Faculty of Science

Prof. dr. sc. Tomislav Živković, Institute Ruđer Bošković

Dr. sc. Deflet Dür

Dr. sc. Neven Bilić, Institute Ruđer Bošković

Dr. sc. Vishnya Maudlin, New York University

Prof. dr. sc. Tomislav Živković, Institute Ruđer Bošković

Prof. dr. sc. Tim Maudlin, New York University

Dr. sc. Marko Uršič

Prof. dr. sc. Tim Maudlin, New York University

Prof. dr. sc. Christian Wüthrich, Universite de Geneve

Prof. dr. sc. Dragan Poljak, FESB Split

Prof. dr. sc. Christian Wüthrich, Universite de Geneve

Dr. sc. Ilya Shapiro

Dr. sc. Neven Bilić, Institute Ruđer Bošković