First Zagreb School on Theoretical Physics

Monday 26 June 2017 - Friday 7 July 2017

Scientific Programme

The school covers four areas and is organized in two weeks as follows:

Week 1 - Particle Phenomenology

Topics in Particle Phenomenology include lectures that range from the physics of the Standard Model, to Beyond the Standard Model, to Neutrino and Flavour physics.

Confirmed speakers:
Sébastien Descotes-Genon (LPT Orsay)
Francesco Sannino (CERN,CP3-Origins, University of Southern Denmark)
Goran Senjanović (GSSI, L'Aquila & ICTP, Trieste)
Samuel Wallon (LPT Orsay)

Week 1 - Cosmology

Topics including physics of the early universe, structure formation, cosmic rays and phenomenology of Dark Matter.

Confirmed speakers:
Paolo Gondolo (University of Utah)
Piero Ullio (SISSA, Trieste)
Matteo Viel (SISSA, Trieste)

Week 2 - Mathematical Physics

Topics include Entanglement entropy, Black hole physics and Higher spin theories.

Confirmed speakers:
Michael Haack (Arnold Sommerfeld Center for Theoretical Physics, LMU, Munich)
Roberto Percacci (SISSA, Trieste)
Max Riegler (Universite libre de Bruxelles)
Ivo Sachs (Arnold Sommerfeld Center for Theoretical Physics, LMU, Munich)
Sergey Solodukhin (LMPT, University of Tours)
Erik Tonni (SISSA, Trieste)

Week 2 - Solid State Physics

Lectures on First principles calculations for crystal structure prediction, Reproducibility in density functional theory calculations, NMR characterization, Advanced exchange-correlation functionals and Microscopic theory of friction

Confirmed speakers:
Stefano de Gironcoli (SISSA, Trieste)
Emine Kucukbenli (SISSA, Trieste)
Franco Pellegrini (SISSA, Trieste)