







International Spring School

Causal Fermion Systems

A new approach to fundamental physics

February 26 - March 2, 2018 University of Regensburg, Germany

The theory of causal fermion systems is an approach to describe fundamental physics. It gives quantum mechanics, general relativity and quantum field theory as limiting cases and is therefore a new candidate for a unified physical theory.

The school gives an introduction to the mathematical framework and the physical concepts behind the theory. Furthermore, we explain recent developments in the following directions:

- · analysis of minimizers of causal variational principles
- · effective field equations and dynamics of solutions
- non-regular geometry and quantum geometry
- · link to classical field theory and quantum field theory

The school is addressed to master and PhD students in theoretical physics and mathematics.

More information and registration:

go.ur.de/cfs2018

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