

## B A S I S «BASIS» Foundation Summer School 2018



## "MANY BODY THEORY MEETS QUANTUM INFORMATION"

The school targets advanced students, PhD students and young researchers specializing in theoretical physics of many body systems English **Working language:** August 19-31, 2018 Dates: Lecture courses "Many-body disorder and quantum thermodynamics", Dmitry Abanin, (preliminary): Geneva University "Real-time dynamics", **Guy Cohen**, Tel Aviv University "Dynamical control of quantum matter", Eugene Demler, Harvard University, Cambridge "Superconducting quantum information devices", Arkady Fedorov, University of Queensland, Brisbane "Phase transitions in correlated and topological systems", James LeBlanc, Memorial University of Newfoundland "Correlated materials simulations: from DFT to DMFT and beyond", Alexander Lichtenstein, Hamburg University "Dynamics of quantum systems close to adiabatic limit", Anatoli Polkovnikov, Boston Universityversity "Ultracold matter", **Andrey Turlapov**, Institute for applied physics, Nizhny Novgorod "Simulation of many-body physics with existing quantum computers", Walter Pogosov, F.L. Dukhov VNIIA, Moscow Further information and application form are available at **Participation:** basis-foundation.ru/summer-school Application deadline - March 31, 2018 **Organizers:** Venue: **A. Rubtsov** (Moscow State University & Russian Quantum Center), chair O. Boytsova ("BASIS" Foundation) **HELIOPARK Lesnoy** Hotel (Solnechnogorsk district, **P. Arseev** (Lebedev Physical institute) Moscow region) **G. Astretsov** (Moscow State University & Russian Quantum Center) **A. Markov** (Moscow State University

Foundation for the Advancement of Theoretical Physics and Mathematics "BASIS" was established in 2016 by the Russian businessman Oleg Deripaska with the main goal to support theoretical physics in Russia.

& Russian Quantum Center)

**A. Porembskaya** ("BASIS" Foundation)

All programs of "BASIS" Foundation are designed to provide a systematic and complex support of theoretical physics and mathematics in Russia, to improve competitive level of Russian scientist and lecturers as well as to strengther the connection and interrelation between science and education in this field.