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FOR ADVANCED STUDIES
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Natural Sciences Colloquium

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Quantum Heat Engines

A standard model of a macroscopic heat engine (e.g. a steam engine) consists of a working fluid, two heat baths at different temperatures, and a piston which extracts useful work from the device. Those parts of the system are usually connected by valves and a flywheel. My talk is devoted to the question whether those elements are also present in the case of microscopic engines operating according to principles of quantum mechanics. The natural applications concern various types of solar cells and mechanisms of photosynthesis.

Tuesday July 29th, 2014, 12:15 h
FRIAS Lecture Hall, Albertstr. 19, Freiburg

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