

STATISZTIKUS FIZIKA SZEMINÁRIUMOK

2019. július 3.
szerda, 11.00
ELTE TTK Északi Tömb 2.54

Gábor Vattay

Mean Field Quantum Computing

In a few years, quantum computing is reaching a level of maturation when it becomes competitive with classical supercomputers in specific computational tasks of practical interest. In the emerging "near-term quantum processors," quantum statistical mechanics plays a vital role. In my talk, I briefly present the concept of adiabatic quantum computing and "Ising Machines." Then I show our new results on variational approaches to adiabatic quantum computing. In particular, the tradeoffs between entanglement and precision. The variational method leads to Hartree type self-consistent equations opening up the possibility of integration of small coherent quantum computers into large hybrid quantum-classical computers.

1117. Budapest, Pázmány Péter sétány 1/A (Északi tömb)

2.54-es szoba

<http://glu.elte.hu/~statfiz/index.html>
<https://www.kfki.hu/elftrfsz/szem.html>