Contribution ID : **4**   Type : **not specified**

S. Pilati - Adiabatic quantum computing and simulated quantum annealing (part 1)

lunedì 16 settembre 2019 11:00 (90)

I will introduce some elements of adiabatic quantum computing, with special focus on approaches that aim to solve hard combinatorial optimization problems via quantum annealing. The main features of currently commercialized quantum annealing devices will be described. I will provide some notions concerning quantum Monte Carlo algorithms and discuss how these simulation techniques are being use as a benchmark for quantum annealers and as a tool to inspect if and when a quantum quantum annealing devices might display a quantum speed-up compared to classical optimization methods.