Quantum Annealing Paper in *Physical Review* X

September 6, 2016 (HP115). We first evoked Quantum Annealing (QA) in 2014, at the occasion of the *Time Magazine* popular article on the QA computing machine, a "quantum annealer" using superconducting "qubits", which has been developed and marketed by the Canadian D-Wave Company (see HP69). At that time the prevailing opinion of experts was that QA offers no demonstrated advantage over known computing methods. In the free-access *Physical Review* X of August 1st, 2016, a group of Google authors published the paper by V.A. Denchev et al. "What is the Computational Value of Finite-range Tunneling?" containing a more systematic comparative analysis of QA computation methods with those usable on classical computers. These authors conclude that for certain classes of optimization problems with very many variables QA can offer orders of magnitude gain in computation time. They discuss the implications of these findings for the design of next-generation quantum annealers.