

Abstract Submitted
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Progress on exploring practical applications of quantum annealing and D-Wave One SERGIO BOIXO, USC- ISI, FEDERICO SPEDALIERI, USC - ISI — A D-Wave One quantum optimizer is currently being installed at the newly created USC-Lockheed Martin Quantum Computing Center. This chip implements quantum annealing at finite temperature as a computational resource, with 90 working qubits. Quantum annealing is a particularly simple branch of adiabatic quantum computation. We report work in progress on exploring practical applications of quantum annealing in general, and this chip in particular. Some of this work is done in collaboration with Aspuru-Guzik's group at Harvard.

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