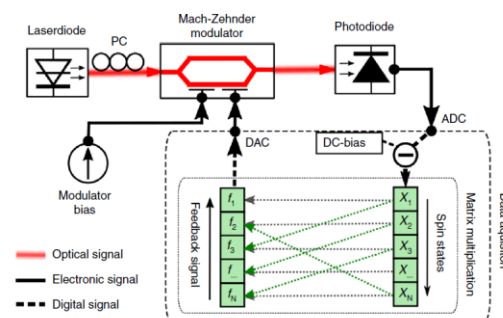
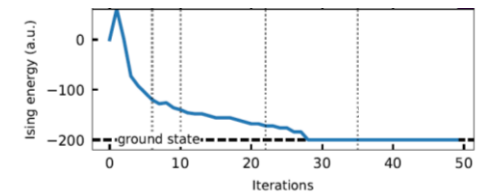
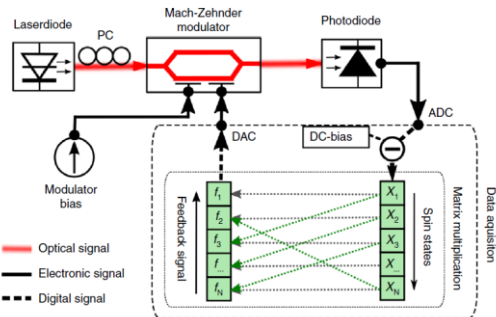






Schematic setup of an opto-electronic Ising machine. The light of a single-mode laser is sent through a Mach-Zehnder modulator. After detecting the optical power, the value of the time-multiplexed artificial spins is recorded using an FPGA. The electrical feedback signal is then calculated in the FPGA and sent to the modulation signal port of the modulator, closing the electro-optical feedback loop. (right) Typical evolution of the energy of the Ising machine, showing a gradual decrease of the energy until the lowest energy ground state is reached. The value of the spins in the ground state then corresponds to the optimum solution of the encoded optimization problem.