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Title: Parallelizing the Edward-Anderson spin glass model in Janus, an FPGA based computer

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We describe Janus, an FPGA based supercomputer built for the computation of Monte Carlo simulations of certain models studied in statistical mechanics, like spin glasses. We give an overview of the models and algorithms implemented on Janus, as well as a description of the hardware implementation of the algorithms. We detail how we parrallelize our simulations, and give our measurements of performance and parallel efficiency for big lattices of Edward-Anderson model parallelized in several FPGA of the Janus supercomputer.