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Comparing embedding penalties between minor-embedding, chimaera and the paqo-scheme (lhz-scheme) as well as to direct SQA

We briefly cover the minor embedding, the chimaera graph embedding and the recently introduced architecture based on parity constraints (paqo). Constraint scheduling optimization as well as corresponding decoding strategies will be presented. The main focus consists of the scaling-comparison between embeddings as well as a with direct SQA to determine the embedding penalty. The simulations are done with a high performance discrete-time metropolis-Monte Carlo SQA code, with embedded system sizes up to 2000-3000 spins. co-author: Dr. Wolfgang Lechner