$\mathbf{QNC}_1 \subset \mathbf{noisy}\text{-}\mathbf{BQP}$

Michael Benor David Ponarovsky September 15, 2024

1 The Noise Model

2 Fault Tolerance Protocol at Linear Depth.

Claim 2.1. There is $p_{th} \in (0,1)$ such that if $p < p_0$ then any quantum circuit C with depth D and width W can be computed by p-noisy, resets allowed, circuit C', with a depth at most $\max D, \log(WD)$.