

- Repeat Edoardo's plot but restarting the VQE training after applying the (hyperoptimized) DBI.
- Fix the problem to one we know it can converge (e.g.  $N_{qubits} = 6$ ) and:
  - fix the number of iterations  $s_{vqe}$  and make the  $s_{dbi}$  varying;
  - fix the number of DBI steps  $s_{dbi}$  and make the  $s_{vqe}$  varying;

We can make a count of the computational cost of the algorithm for example by counting the number of T gates required to execute each training.