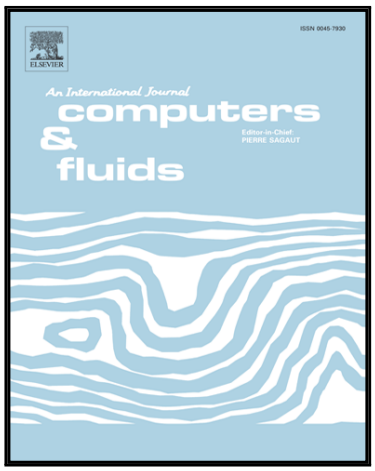

Parallel Evaluation of Quantum Algorithms for Computational Fluid Dynamics

René Steijl, George N. Barakos

PII: S0045-7930(18)30184-1
DOI: 10.1016/j.compfluid.2018.03.080
Reference: CAF 3841

To appear in: *Computers and Fluids*

Received date: 24 January 2017
Revised date: 21 March 2018
Accepted date: 28 March 2018

Please cite this article as: René Steijl, George N. Barakos, Parallel Evaluation of Quantum Algorithms for Computational Fluid Dynamics, *Computers and Fluids* (2018), doi: 10.1016/j.compfluid.2018.03.080

Highlights

- Demonstration of the use of quantum circuits within computational fluid dynamics methods
- The simulation of quantum algorithms on parallel classical computers is investigated
- A hybrid quantum/classical algorithm for incompressible Navier-Stokes equation is introduced