Unathi Koketso Skosana

Department of Physics, Stellenbosch University
Website
Github
ukskosana at gmail dot com

WORK

Intern Research intern, IBM Research Africa, 2022-

EDUCATION

PhD Quantum computing applications and optics, Stellenbosch University, 2022-

MSc. Quantum computing applications and optics (*cum laude*) link, Stellenbosch University, 2020-2022

Hons. Theoretical Physics (*cum laude*), Stellenbosch University, 2019

BSc. Theoretical Physics (*cum laude*), Stellenbosch University, 2016-2018

PREPRINTS N' PUBLICATIONS

2021 Unathi Skosana and Mark Tame "Demonstration of Shor's factoring algorithm for N = 21 on IBM quantum processors". In: *Sci Rep* (Aug 2021). DOI: 10.1038/10.1038/s41598-021-95973-w. arXiv: 2013.13855 [quant-ph]

2021 Unathi Skosana and Mark Tame "On the advantages of relative Toffoli gates". Submitted to *SAIP2021* conference 7011.3773

TALKS N' POSTERS

2021 "On the advantages of relative phase Toffolis" SAIP2021. 28 July

2019 "Modeling of Measurement-based Quantum Computing on IBM Q Experience Devices" Quantum Africa V conference. 5 Sept

2019 "Modeling of Measurement-based Quantum Computing on IBM Q Experience Devices" WitsQ Summer School. 10 Dec

GRANTS N' RECOGNITION

2022 Qiskit Advocate, Qiskit

2020- Masters Research Grant, CSIR

2020 Recognized as a undergraduate top achiever by the physics department at Stellenbosch University

2019 Merit Bursary, Stellenbosch University

2018 Undergraduate Fund, SKA Undergraduate Programme

SELECTED PROJECTS

2021 Hyperentangled-photons-masters-experiment

SERVICE

2018- Teaching assistant for physics 114/144 at Stellenbosch University