**MSc PROGRESS REPORT**

**(STELLENBOSCH UNIVERSITY)**

**Name of student:** Zenabu Suboi

**Student number:** 22326979

**Degree:** MSc (Mathematics) **-** Full time

**Supervisor:** Prof. Wim Delva

**Co-supervisor:** Dr Marijn C. Hazelbag

**Title of research project:** A comparison of Approximate Bayesian Computation (ABC) methods for model calibration.

**Year of registration:** 2019 **Expected submission date:** October 2020

**Research aims and plan for the past six months:**

1. Compare two of the Approximate Bayesian Computation methods (Sequential and Rejection ABC) using a simple SIR model.
2. Attend workshops and short courses required for the thesis

**Progress over the last six months:** VeryGood.

1. Compared the two Approximate Bayesian Computation methods (Sequential and Rejection ABC) using a simple SIR model.
2. Attended three workshops (MMID, MMED and SACEMA Research days) and three courses.

**Reasons for unsatisfactory progress:** N/A

**Research aims and plan for the next six months:**

1. To Include other methods in the comparison such as;

* Bayesian Maximum Likelihood Estimation
* Least squares method
* Maximum likelihood Estimation method

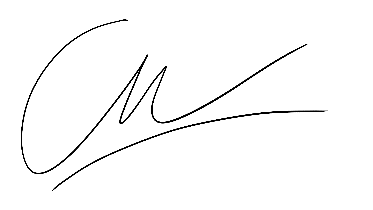
1. To Start writing up my thesis
2. Learn methods for parallel computing
3. Possibly publish in collaboration with Amazon web services

**Supervisor’s Comment:**

Zenabu is working well, I don’t expect any delays.

**Will the degree be completed in the period as originally planned? If not, furnish reasons:** Yes, the degree will be completed in the period as originally planned.

**Student’s signature: …** z:f.fo ... **Date:** 16-10-2019

**Supervisor’s signature: …………………. Date:** 16-10-2019