

CoE-MaSS weekly seminar series

THE DST-NRF CENTRE OF EXCELLENCE IN
MATHEMATICAL AND STATISTICAL SCIENCES (CoE-MaSS)
PRESENTS A SEMINAR BY

Dr Gerald Marewo

*(Department of Mathematics and Applied Mathematics,
North-West University)*

“Numerical solution of some nonlinear Poisson equations”

Friday, 31 May 2019

10h30-11h30

CoE-MaSS Seminar Room, 1st floor, MSB, Wits.



In this study, we consider a boundary value problem for nonlinear Poisson-type equations. Such equations have many real life applications including the analysis and design of semiconductor devices. The nonlinearity of the equations motivates using a numerical method of solution. To this end, we couple the Newton method with a Galerkin finite element method. The overall method is implemented on the computer using MATLAB. Numerical experiments are used to investigate the efficiency of the method.

Email: Gerald.Marewo@nwu.ac.za

You can connect to all CoE-MaSS weekly seminar series remotely using Vidyo.

1. Click on this link to connect to the [CoE-MaSS Seminar Room](#)
2. Type in your display name (e.g. *UKZN-NameSurname*)
3. Click Go.

If you have trouble connecting, please phone the Technical Support Officer on duty in-venue between 10h00-10h25 on +27(0)11 717 6079. *This phone will not be answered once the seminar has started.*

Important videoconferencing netiquette:

Please ***mute your microphone*** so that there is no feedback from your side into the virtual room. During the Q&A slot, you can then unmute your microphone if you have a question to ask the speaker. Thank you.

