

## **Research Group (Applied maths)**

### **Mathematical Modelling, Applications and Analysis**

- **Topics covered**

**Modelling in Applied Sciences** (including biomathematics, ecology, applied functional analysis, biosciences, and mathematical epidemiology) with dynamical systems, integral & differential equations, fractional calculus.

**Applications and Mathematical Analysis** of real life phenomena models ((wave motion, chaos, diffusion, population dynamics, replicator-mutator processes, game dynamical systems with learning, evolution of biopolymer)

- **Members & Students:**

Dr Zakaria Ali (staff)

Dr Amos Kubeka (staff)

Dr Emile Franc Doungmo Goufo (staff)

Dr Patrick Tchepmo (Fellow post doc)

Dr Mohamed Mbehou, (specialist numerical analysis, Cameroon \& post doc, Unisa) }

Mrs Stella Mugisha (PhD Student)

Mr Frank K. Owusu (PhD Student)

Mr Edmund H Petersen (MSc Student)

Mr Maduma Khumalo (MSc Student)

- **National and International Collaborators (Research network)**

Prof Jules Tapamo (specialist image processing, UKZN, SA

Dr Herman Douala (specialist numerical analysis, Cameroon)

Prof Jean Brousseau (computer scientist, Canada)

Prof Sunil Kumar (specialist in Chaos theory, India)

Prof Olivare M. Dzune (electrical engineer, USA) )