

*A variable step-size formulation of the new one-step method for
integrating the Michaelis–Menten enzymatic reaction model*

Mufutau Ajani Rufai
(University of Bari Aldo Moro)

In this talk, I will present a variable stepsize formulation of a new one-step hybrid method for solving the Michaelis Menten enzymatic reaction model. I will use a suitable polynomial to approximate the theoretical solution of the problem under consideration. The basic characteristics of the proposed technique will be theoretically analyzed. Some Michaelis Menten enzymatic reaction model problems will be numerically solved to determine the efficiency and the superior impact of the developed error estimation and control strategy.