

BOOK



4. AIYESIMI, Y. M., OLAYIWOLA, O. R. and SALIHU, O. N. Effects of Pollutants and Atmospheric Temperature Rise on Agriculture. 35th Annual Conference of the Nigerian Mathematical Society (NMS) at Federal University of Technology, Minna, Nigeria Held from 3rd - 6th May, 2016.



*Annual
Conference
of the*

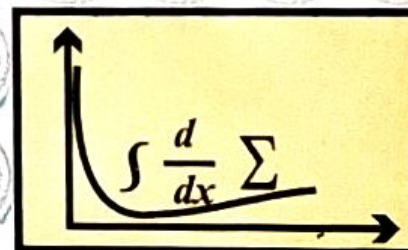
**NIGERIAN MATHEMATICAL
SOCIETY (NMS)**

Theme

**MATHEMATICS: A TOOL
FOR VERITABLE CHANGE**

Host

Department of Mathematics
Federal University of Technology, Minna.



DATE: 3RD -6TH MAY, 2016

(HAM). Using HAM, we obtain an approximate solution to the governing Rogue wave equations. The free surface displacement $\eta(x, t)$ and velocity potential, $\phi(x, z, t)$ obtained are compared with similar results using higher order Stokes approximations.

A56: Effects of Pollutants and Atmospheric Temperature Rise on Agriculture.

¹ Aiyesimi, Y. M., ² Olayiwola, O. R. and ³ Salihu, O. N.

Department of Mathematics, Federal University of Technology, Minna, Nigeria.

Email: ³ so.nasiru@futminna.edu.ng, 08035789694

Abstract

Climate change is emerging as one of the most challenging problems facing the world in the 21st century. In this research work, a transient equation describing this phenomenon is presented. We assume the dusty fluid to be flowing over a flat plate while the other plate is at infinity. The dusty particles are to be uniformly distributed throughout the fluid. The two plates are to be electrically non-conducting and kept at constant temperatures. The equations to the phenomenon are solved analytically using a self similarly solution and Frobenius method. The results obtained are presented graphically and discussed. It is discovered that temperature increases as the Hartman number due to pollutants increases.

KEYWORDS: Temperature, Pollution, Agricultural Productivity, Climate change, Greenhouse gas.

A57: A Mathematical Model of Assets and Liabilities Management Based on Dynamic Programming

G. Adamu* and M. Jiya

Department of mathematics, Federal University of Technology Minna
Ahlul_baity@yahoo.com, jiyason2010@gmail.com

Abstract

In this paper we attempt to address the importance of misery for banking sector, which is the difficulty of assets and liabilities management (ALM). For the past years, a lot of existence mathematical models were presented for solving (ALM) problem. We will propose the new approach to ALM based on stochastic partial differential equations for loan and deposit dynamics. Setting the bank's initial position, and different deposit inflow situations, the model will allow to present simulations including stress-testing, and can be used for measurement of liquidity risk, for examine loan decisions to choose a realistic result.

A43: Unsteady Hydromagnetic Free Convection Heat Transfer over a Vertical Plate with Heat Generation; J. D. Olisa

A44: Influence of thermal-diffusion and diffusion-thermo on MHD Maxwell with Variable Properties in a Porous Medium; Baoku, I.G., Onifade, Y.S., Mustapha, A.O. and Israel-Cooke C.

A45: Unsteady Chemically Reactive MHD Mixed Convective Heat and Mass Transfer Flow Over a Stretching Sheet in the Presence of Hall Current; M.O. Lawal and S.O. Ajadi

A46: On the Representation, Recognition and Reversibility of Formulas in Propositional Matrices; E. D. John

A47: Alternative Second-Order N-Point Spherical Response Surface Methodology Design and Their Efficiencies; M. P. Iwundu

A48: Solution of Parabolic Partial Differential Equations (PDEs) Using Decomposition Method; F. O. Ogunfidiimi, and Oduola Samson O.

A49: An Oscillatory MHD Mixed Convection Flow past an Infinite Vertical Porous Plate with Variable Suction, Radiation and Heat Generation in the Presence of Chemical Reaction; Y.O. Tijani and S.O. Ajadi

A50: Analysis of a Couette Flow of a Nanofluid in an Inclined Channel with Soret and Dufour Effects; A. Yusuf, Y. M. Aiyesimi, G. T. Okedayo and M. Jiya

A51: On SDC for MHD Velocity Slip effected Blasius Problem; P.Mebine

A52: Coupled Heat and Mass Transfer by Natural Convection in a Porous Medium with Magnetic Field and Chemical Reaction Effects; H. Usman, I. J. Uwanta and E. Omokhuale

A53: Periodic Solutions for Certain Nonlinear Non-Autonomous Third Order Ordinary Differential Equations; Anthony Okeke and Tijjani Bukar

A54: Comparative Study of Arnoldi Methods for the Solution of Quadratic Eigenvalue Problem; Usman Sanusi, Hamisu Musa

A55: An Analytic Study of Rogue Waves and Its Related Events; Ifidon, E. O. and Ejinkonye I. O.

A56: Effects of Pollutants and Atmospheric Temperature Rise on Agriculture; Aiyesimi, Y. M., Olayiwola, R. O. and Salihu, O. N.

A57: A Mathematical Model of Assets and Liabilities Management Based on Dynamic Programming; G. Adamu and M. Jiya

Welcome to the 35th Annual Conference of the Nigerian Mathematical Society (NMS)

Host: Department of Mathematics and Statistics, FUT, Minna.

Order of Events

Tuesday 3rd May, 2016

Arrival / Registration opens

Venue

Department of Mathematics, School of Physical Sciences

Wednesday 4th May, 2016

Conference Opening Ceremony / Investiture of

Fellows

Venue

CPES Hall, FUT, Minna

9.00 – 10.00AM

Arrival of Participants, guests and dignitaries

10.00AM

National Anthem

10.05AM

Opening Prayer

10.10AM

Remarks by **Prof. N. I. Akinwande**, President, NMS

10.20AM

Remarks by **Prof A. S. Abubakar**, Dean, School of Physical Sciences, FUT, Minna

10.25AM

Welcome Address by the Chief Host, **Prof. M. A.**

Akanji, ViceChancellor, FUT, Minna

10.30AM

Official Opening of the Conference by Special Guest of Honour, **Alh. Abubakar Sani Bello**, the Executive Governor of Niger State

10.35AM

Investiture of Distinguished Fellows – FNMS and Brief