

TRANSACTIONS OF THE NIGERIAN ASSOCIATION OF MATHEMATICAL PHYSICS

[TNAMP]

New

Guidelines for contributors

Manuscripts should be submitted in triplicate copies along with a non-refundable fee of **₦2,000.00** (Two thousand naira only) in bank draft written in favour of Professor J.O.A. Idiodi, whose address appears below. Manuscripts can also be submitted via e-mail to the Editor-in-chief (see the e-mail address below) **Currently issues of the Transactions appear every year in the months of January, March, May, etc.**

Articles are entertained all the year round but authors wishing their manuscript to be published in any of the journal issues should endeavor to submit their manuscripts at least two months earlier than the month of the Journal issue.

The submission of a paper implies *it has not been* published elsewhere, and it is not under consideration for publication with other journals. Once a paper is accepted, it is assumed that the author has ceded the copyright to the Nigerian Association of Mathematical Physics.

Manuscripts must be in English Language, should be typed in double spacing and should not exceed 20 typed A4 paper in length. Authors are urged to pay careful attention to symbols, which should be typed neatly and unambiguously, *using equation editor (NOT SYMBOLS) and separating equation number from the equation file and each equation statement should NOT BE GROUPEd and should be properly aligned to distinguish subscripts and superscripts. Any paper with mathematical equations, typed without using equation editor would not be accepted and equations should not be grouped as objects. All tables, figures and references must be cited in the body of the paper. Tables, figures and references should be numbered in the order in which they are cited in the text. All graphs and figures should be neatly drawn or plotted and bold enough in case of enlargement.*

The Standard International (SI) system of units should be used in all manuscripts. Unusual symbols, abbreviations or notations should be defined when first mentioned in the text.

Authors should also submit CD (Compact disc, not diskette) containing their manuscripts done in Microsoft word 2003 and NOT in PDF. Authors should be sure that their soft copy is VIRUS-FREE, otherwise the paper would be rejected and any paper not on CD would also be rejected.

Manuscripts should contain the following headings, where appropriate: **Title** (followed by the author's name, address, e-mail and phone number); **Abstract** (that is, a brief summary of the contents and conclusion of the paper, not exceeding 200 words); **Introduction, Theoretical analysis, Experimental work, Results and Discussion, Conclusion, Acknowledgement and References. The numbering of the headings and subheadings and references should be as in the Journal of NAMP.**

All papers will be acknowledged and refereed and papers once received will not be returned to authors. Contributors of an accepted paper will be expected to pay a publication charge. As a result of the highly unstable economic climate, publication charges are subject to frequent review. Contributors of articles are therefore expected to liaise with the Editor-in-chief to obtain the most recent information on the charges they are to pay.

*Professor J.O.A. Idiodi,
Editor-in-chief,
e-mail address: jidioidi@hotmail.com,
Department of Physics,
University of Benin, Benin City,
Nigeria.*

Contents



===== :

An Analysis of a Pilot Survey of the Problems of Electricity Distribution In Delta State, Nigeria	<i>Tsetimi J., Atonuje A. O. and Mamadu E. J.</i>	109
Selection Techniques for Efficient Classification and Analysis of Biomedical Images	<i>Musibau Adekunle Ibrahim and oladotun Ojo</i>	117
Instability of the Perturbed Generalized Photo-Gravitational Restricted Three Body Problem With Poynting-Robertson Drag	<i>S.B. Akere-Jaiyeola and A. AbdulRaheem</i>	127
Energy Levels and Thermal Functions of Diatomic Molecules in Hulthén Plus Deng-Fan Rotating Oscillator	<i>Timtere P., Eyube E.S. and Ibrahim Y.</i>	139
Applications of Inhomogeneous Incident Wave Frequency on the Non-Linear Spatial Absorption of Low-Frequency Alfven Waves in High-Energy Plasma Physics	<i>Ogundola S. and Omeke N.E.</i>	149
Investigation of Limestone Deposit at Ojirami Mixed Secondary School, Ojirami, Akoko Edo Local Government Area, Edo State Using Electrical Resistivity Imaging Method	<i>Airen O.J., Iwere O.F. and Iyere P.S</i>	155
Geophysical Investigation and Aquifer Characterization Of Some Sited Boreholes in Some Local Government Areas in Kano State, Nigeria	<i>S. Auwalu, S.M. Farouq and M. Saleh</i>	161
Reliability Assessment of Power Generating Plant A Case Study of Ikorodu Generating Station	<i>A.A. Okandeji, O.F. Odeyinka, O.O. Olaluwoye, and F. Onaifo</i>	169
Simulation Of Power Conversion Efficiency P3ht, Pcbm By Varying Active Layer Thickness	<i>Ogabi C.O., Idowu B.A., Boyo A.O. and Kesinro R.O.</i>	175
An Artificial Neural Network Estimation of Global Solar Radiation at Ibadan, Nigeria Using Meteorological Data	<i>E.F. Nymphas and C. G. Udomboso</i>	179
Sustained Oscillation In Solutions Of Linear Piecewise Continuous Ordinary Delay Integro-Differential Equation By Brownian White Noise	<i>Augustine Omoghaghare Atonuje and Newton I. Okposo</i>	187
Flow Control of Fluids Through Porous Media Of Vertical Channel Due To Suction/Injection	<i>Anas Sani Maihulla</i>	195

TRANSACTIONS OF THE

NIGERIAN ASSOCIATION OF MATHEMATICAL PHYSICS

Vol. 12



Contents: = = = = = = = = = = = = = = = =

The Pseudometric Topology of A Seminorm Is A Vector Topology	<i>Sunday Oluyemi</i>	<i>1</i>
Some Short Notes On The Topology Of The Seminorm	<i>Sunday Oluyemi</i>	<i>11</i>
On A Local Base Of The Weak Topology	<i>Sunday Oluyemi</i>	<i>17</i>
Cohomological Stability and Harmonic Analysis of Discrete Dynamical Systems Of Compact Connected Lie Groups	<i>M.E. Egwe and N.O. Okeke</i>	<i>21</i>
On 2 –Groups G such that Whenever $H < G$ and H is Minimal Non-Abelian, then H is an $M_2(2, 2)$ –Group	<i>S. Umaru and O. Baharinsa</i>	<i>29</i>
Stability Properties Of A reduced Group C*-Algebras For Twisted C*-Cross Product	<i>Onuche A.V., Mike P.U.A. and Panle A.B.</i>	<i>31</i>
Basics Prime Submodules	<i>Mengue Mengue David Joel</i>	<i>41</i>
A Pseudo Graph Arising From Additive And Multiplicative Inverses Modulo N	<i>Amina Muhammad Lawan</i>	<i>45</i>
Flow Field And Group Energy Transport For The Progressive Ocean Water Waves	<i>Stephen Ehidiemhen Uwamusi</i>	<i>53</i>
Visualization of Some Abstract Concepts In Statistics	<i>S. A. Ibrahim and Y. S. Gorah</i>	<i>63</i>
A Binary Logistic Regression Analysis of Students' Performance In Computer Science Programme	<i>S. A. Ibrahim and N.A. Fadil</i>	<i>69</i>
On Age Replacement Model With The Cost Of Unplanned/Repair Depending On Time	<i>T. A. Waziri, S. Maikudi, A. Yekini and I. Abubakar</i>	<i>73</i>
Third Order Iterative Method For Solving Nonlinear Equations Free Of Second Derivative	<i>M.S. Ndayawo and B. Sani</i>	<i>79</i>
A Novel Approach For Solving Variable Coefficient Initial Value Problems Using Artificial Neural Networks	<i>Okereke R.N. and Maliki O.S.</i>	<i>89</i>
Trend Analysis And Prediction For Daily New Confirmed Covid-19 Cases In Nigeria	<i>S. Suleiman and A. B. Zoramawa</i>	<i>97</i>
Optimization Of Economic Order Quantity (Eoq) Under Stochastic Demand	<i>Aisha S.H. and Sani B.</i>	<i>101</i>