

CURRICULUM VITAE

PERSONAL DETAILS

Name: Boniface Otieno Ndinya

Date of birth: - 20th October 1975

Permanent Address: - P. O. Box 3405 Kisumu, 40100

Mailing Address: - Masinde Muliro University of Science and technology, Department of Physics
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EDUCATION BACKGROUND

1. Maseno University: – September 2007 – December 2010
Awarded Doctor of Philosophy in physics on 11th December 2011
Thesis title:-'**Repulsive electron-electron interaction and nuclear charge screening:-
Ground state of two-electron atoms**'.
2. Maseno University: – September 2000 – December 2005
Awarded Master of Science degree in Theoretical Physics on 16th December, 2005
Thesis title: - '**Cavity-loss induced generation of entangled states**'
3. Kenyatta University: – July 1994 – October 1998
Bachelor of Education (Science) degree – Physics /Mathematics
Awarded **First Class Honors** on 16th October, 1998
Subjects: Physics (major) and mathematics (minor)

SCHOLARSHIPS AND AWARDS

1. DAAD In-country scholarship for PhD in Physics at Maseno University:- From 01-09-2007 to 31-08-2010
2. DAAD Short-term research scholarship for PhD research at Max-Planck institute of Physics of Complex Systems, Dresden, Germany:-From 01-10-2008 to 31-03-2009
3. DAAD staff exchange fellowship at Makerere University:- 01-09-2014 to 30-11-2014

SEMINARS AND WORKSHOPS

1. Laser science and application: Induction course March. 2008
2. Laser science and application-JKUAT, Nairobi, April. 2009
3. ISWI/SCOSTEP, Space science school, Nairobi, October 2013
4. National Cohesion and National Values Workshop at MMUST, MCU OO2 conference hall, Kakamega 5/5/2016

5. MMUST-QMS Continual improvement training at Bishop Stam, Kakamega.;-29-30/8/2016
6. National Research Fund review of Reseach infrastructure support proposals meeting, at Heritage Resort, Naivasha 17-19/5/17
7. Kenya-DAAD Scholars (KDSA) conference/AGM, Maseno University, Kisumu, 15-16/6/2017
8. KENET-Computational modeling and materials Science Workshop at Shieywe Hotel, Kakamega , 6-7/7/2017
9. AYGN/KYGN Integrated workshop on Nuclear Advocacy and Communication; Safari Part Hotel , 29th -30th November 2017
10. AFRA project counterpart and alternate counterparts meeting, NACOSTI, 25th April 2018

PUBLICATIONS

1. Omollo, J. O. and **Ndinya, B. O.**, *Repulsive Coulomb interaction and nuclear charge screening in Helium and Helium-like ions*, Indian. J. Theor. Phys., (2010), Vol. 58, No. 2, pp 81.
2. **Ndinya, B. O.** and Omollo, J. O., *A direct calculation of first-order wave function of Helium*, Commun., Theor., Phys., , (2010), Vol. 54, No. 4, pp. 647
3. **Ndinya, B. O.** and Onyango, S. O., *Analytical absorption cross-section for photon by a Hydrogen 2s atom*, Commun., Theor., Phys.,, (2011) Vol. 55, No. 4, pp 659
4. **Ndinya, B. O.**, *Analytical absorption cross-section for photon by a Helium 23S metastable state*, Can. J. Phys., (2012) , 91:85-88, dx.doi.org/10.1139/cjp-2012-0285
5. **Ndinya, B.**, Oduor, A. and Omolo, J., *Energy transfer approach in the generation of atomic entangled states*, The African Review of Physics, (2013), 8:0021, pp. 139
6. Omondi George, **Ndinya Boniface** and Baki Paul, *Signatures of low latitude Geomagnetically Induced Currents effects on transformers in Nairobi, Kenya*, Proc. of GIC workshop, Cape Town, April 2014
7. **B. O. Ndinya** and A. Okello, *Thermodynamics Properties of a System with Finite Heavy Mass Nuclei*. American Journal of Modern Physics. Vol. 3, No. 6, 2014, pp. 240-244. doi: 10.11648/j.ajmp.20140306.16
8. Omondi George, **Ndinya Boniface** and Baki Paul, *A Study of the Equatorial Ionosphere Over Nairobi during Selected Magnetically Disturbed and Quiet Times for the Year 2009 Using Co-Located Instruments*, International journal of advanced research in physical science (IJARPS), Vol. 1, Issue 6, 2014, pp 18-26
9. Gerald Mugaya Lisamadi, **Boniface Otieno Ndinya**, Joseph Akeyo Omolo. *The Test of Entanglement of Polarization States of a Semi-Classical Optical Parametric Oscillator*. *American Journal of Modern Physics*. Vol. 6, No. 3, 2017, pp. 37-42. doi: 10.11648/j.ajmp.20170603.1

10. Omondi George Erick, Baki Paul, **Ndinya Boniface**. Quiet time correlation between geomagnetic field variations and the Dynamics of the East Africa Equatorial Ionosphere. *International Journal of Astrophysics and Space Science*. Vol 5, No 1, 2017, pp. 6-18. doi: 10.11648/j.ijass.20170501.12
11. Michael Nakitare Waswa, Yudah Kennedy Ayodo, Thomas Walikhe Sakwa and **Boniface Ndinya**. Specific heat of doped high-TC Cuprate Superconductor within Bose-Fermi-Hubbard model. *Journal of Multidisciplinary Engineering Science and Technology (JMEST)*. Vol 4, Issue 4, April 2017.
12. Michael Nakitare Waswa, Yudah Kennedy Ayodo, Thomas Walikhe Sakwa, **Boniface Ndinya** and Kibe Horace. Doped Mott insulators within strong coupling regime. *International Journal of Recent Engineering Research and Development (IJRERD)*. Vol 2- issue 07, July 2017
13. D'ujanga, F.M., Lugonvu, G., Ndinya, B., Probing the equatorial ionosphere using spreadF signatures and GPS scintillations at Maseno in East Africa, *Advances in Space Research* (2018), doi:<https://doi.org/10.1016/j.asr.2018.06.03>

SUPERVISIONS

1. Omondi George, Characterization of Geomagnetically Induced Currents in the power grid in Nairobi, Kenya, M.Sc thesis, Maseno University (2013)
2. Oliver Wanyama Mumali, Statistical Thermodynamics of a strongly interacting Bose-fermi System in a three-dimensional Anharmonic potential, Msc thesis, Kibabii University (2016)
3. Gerald Mugaya Lisamidi, Quantum entanglement properties of a semi-classical parametric oscillation, Msc Thesis, Maseno University (2017)
4. Omondi George, Correlation between Geomagnetic field variations and dynamics of the equatorial ionosphere over eastern Africa, PhD thesis, Maseno University (2017)
5. Lugonvu Geoffrey, Comparison of Ionosphere Scintillation during storm and non-storm periods over East Africa Region Using GPS and Ionosonde Data, MSc thesis, Makerere University (2018)

WORK EXPERIENCE (ACADEMIC)

1. Maseno University: - October 2006-September 2016
Lecturer:-Department of Physics and Materials Science.
2. Masinde Muliro University of Science and Technology
Senior Lecturer:-October 2016

REFEREES

1. Prof. Joseph Akeyo. Email ojakeyo04@yahoo.co.uk; Mob. No. 0721347418
2. Prof. Andrew Oduor. Email andrewoduor22@yahoo.co.uk; Mob. No. 0722334179
3. Prof. Paul Baki. Email paulbaki@gmail.com; Mob. No. 0734524066