

# Curriculum Vitae

## Dr. rer. nat. David Otieno Ambogo

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### EDUCATION

- July 13th 2015-Date: Doctor of natural sciences (Dr. rer. nat), Osnabrueck University, Germany. Thesis title, "Relativistic Energy Correction of the Hydrogen Atom with An Anomalous Magnetic Moment".
- Oct. 2012- July 2015: PhD student, Institute for Mathematics and Informatics, Osnabrueck University, Germany
- Dec 2010 : Master of Science in Pure Mathematics, Maseno University. Thesis title, "On Completely Bounded Operators".
- Nov. 2007 : Bachelor of science (Mathematics), Maseno University. Graduated with First Class honours.
- 1998 - 2001 : High School Education, Awasi Mixed Secondary School, P.O.Box 104, Awasi, Kenya. Obtained B+ (plus) of 70 points on a scale of 84 points in the Kenya Certificate of Secondary Education (KCSE).
- 1990 - 1996 : Primary Education, Masara Primary School, P.O. Box, 16, Ahero, Kenya.
- Nov. 1997 : Primary Education, Pawteng' Primary School, P.O. Box, 24, Awasi, Kenya. Obtained 489 marks out of 700 marks in the Kenya Certificate of Primary Education (KCPE).

### RESEARCH EXPERIENCE

**2015-Date:** Doing collaborative research with Dr. F. O. Nyamwala of Moi University on Spectral Theory of composite differential and difference operators. Two papers are under review on this research.

**2017-Date:** Supervising both masters and PhD students.

### TEACHING EXPERIENCE

- July 2015- Date:- Lecturer, Department of Pure and Applied mathematics , Maseno University, P.O Box 333, Maseno, Kenya.
- Dec 2010- July 2015:- Tutorial Fellow, Department of Pure and Applied mathematics , Maseno University, Kenya.
- Winter sem 2014-2015: Teaching Assistant, Fachbereich Mathematik/Informatik, Osnabrueck University, Germany.
- April 2008 - Dec 2010 :- Graduate Assistant, Department of Pure and Applied mathematics , Maseno University, Kenya.
- Sept. 2007 - March 2008 : B.O.G teacher, St. Alex Ayucha mixed Secondary School, P. O. Box, 9, Awasi, Kenya.

### HONARS AND AWARDS

- Oct. 2012 – Sept. 2015 : Awarded Government of Kenya/Deutscher Akademischer Austausch Dienst (DAAD) PhD Scholarship to Germany

Sept. 2009 – Aug. 2010 : Awarded Deutscher Akademischer Austausch Dienst (DAAD) in-country scholarship for Master of Science in Mathematics.

### **PROFESSIONAL MEMBERSHIP**

Kenya DAAD Scholars Association (KDSA)

### **SKILLS AND TRAINING**

*Computer Skills:* Typing and type setting in LATEX and in MS word. Programming knowledge in R, S+ and C+.

*Training:* Academic proposal writing, Moi University, Eldoret.

### **LEADERSHIP EXPERIENCE**

March 2019-Date: Board of Management Chairman, Masara Primary School.

### **CONFERENCES AND WORKSHOPS**

1. David Ambogo, Explaining Biological Developments Using Mathematical Methods. Presented in the conference on exploring biophysics diversity for sustainable industrial and economic development at Masinde Muliro University of Science and Technology, Kakamega, Kenya (3<sup>rd</sup> July- 4<sup>th</sup> July 2019)
2. David Ambogo, Stability of eigenvalues of Dirac-Coulomb equation with anomalous magnetic moment. Presented in the Co-CoA School 10-14th June, 2013 at the Institute for Mathematics and informatics, Osnabrueck University, Germany
3. Ambogo D.O and Nyamwala F.O The Remainder Term For Differential Operators with Unbounded Coefficients. Presented in The first Strathmore University Mathematics Conference at Strathmore University, Kenya, (15th-20th August 2011)

### **PUBLICATIONS**

1. Nyamwala F.O., Ambogo D.O. and Ngala J.M., Comparative analysis of spectral theory of second order difference and differential operators with odd coefficients, to appear in Kyungpouk Mathematical Journal.
2. David Ambogo, Relativistic Energy Correction of the Hydrogen Atom with an Anomalous Magnetic Moment, Doctoral Dissertation(Osnabrueck University, Germany 2015).
3. John Ogonji Agure, David Otieno Ambogo and Fredrick Oluoch Nyamwala, Deficiency indices and spectrum of fourth order difference equations with unbounded coefficients, Math. Nachr.286, No. 4, 323-339 (2013).
4. N. B. Okelo, J. O. Agure and D. O. Ambogo, Norms of elementary operators and characterization of norm-attainable operators, Int. Journal of Math. Analysis, Vol. 4, 1197-1204 (2010)
5. D. O. Ambogo and J. O. Agure, Growth of norms of the multiplicity maps, International Mathematical Forum, 5, no. 51, 2505 - 2513 (2010)

### **Under review**

6. Nyamwala, F. O., Siro, L. M. and Ambogo, D. O., Spectral Theory of Composite of Commutative Symmetric Differential Operators, Submitted to Journal of Differential Equations.
7. Fredrick O. Nyamwala, Ambogo David and Siro Leonard, Symmetry and Deficiency indices of the composite of Non- Commutative higher order differential operators, Submitted to Journal of Mathematical Analysis and Applications