**Livingstone Onyango Ochilo**

*Curriculum Vitae*

**PERSONAL DETAILS**

 *Birth* November 15, 1968

 *Address* P.O. Box 218-40105, Maseno, Kenya

 *Phone* +254706050243

 *Email* livingstone.ochilo@gmail.com

 *Nationality* Kenyan

**PERSONAL PROFILE**

I am a researcher and lecturer of physics, currently based at the Jaramogi Oginga Odinga University of Science and Technology in Kenya. Having graduated with a Ph.D at the university of Siegen in Germany, I am equipped to teach both undergraduate and post-graduate students in various areas of physics and to conduct the supervision of student research at both levels. My area of specialization is Astroparticle Physics.

**EDUCATION**

**Ph.D. Astroparticle Physics 2012-2016**

*University of Siegen, Germany*

 **Thesis Title:** Mass Composition of Ultra-High Energy Cosmic Rays: A Study Based on Elon-

 gation Rate of Depth of Shower Maximum Measured at the Pierre Auger Observatory

**Theoretical studies**

Advanced particle physics, Detector physics, Historical study of cosmic rays

**Publications**

A sample of the full-author Pierre Auger papers in whose publication I have participated is given in

the list below.

• Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Uni-

versal Estimator of Cosmic-Ray Energy. Physical Review Letters 116, 241101 (2016)

• Energy estimation of cosmic rays with the Engineering Radio Array of the Pierre Auger Obser-

vatory. Physical Review D 93, 122005 (2016)

• Azimuthal asymmetry in the risetime of the surface detector signals of the Pierre Auger Obser-

vatory. Physical Review D 93, 072006 (2016)

• Improved limit to the diffuse flux of ultrahigh energy neutrinos from the Pierre Auger Observa-

tory. Physical Review D 91, 092008 (2015)

• Measurement of the cosmic ray spectrum above $4×10^{18}$ eV using inclined events detected with

the Pierre Auger Observatory. Journal of Cosmology and Astroparticle Physics. JCAP 08 (2015)

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**MSc. Simulation study of cosmic rays 2007-2010**

*Kenyatta University*

 **Thesis Title:** Simulation of the charge ratio of cosmic ray muons in extensive air showers using

 CORSIKA

**Theoretical studies**

Quantum mechanics Computer applications and data analysis

Classical mechanics Mathematical methods in physics

Electrodynamics

among others.

**Bachelor of Education (Science) 1988-1991**

*Kenyatta University*

 Qualification as a trained teacher to teach physics and mathematics in Kenyan high schools.

**WORK EXPERIENCE**

**Lecturer Dec 2016 – Present**

*Jaramogi Oginga Odinga University of Science and Technology*

 Lecturing of Physics and research.

**Supervision of Postgraduate Students**

**Name of Student Level University Status**

Enos Mbiye PhD JOOUST Ongoing

Jack Abibo PhD JOOUST Ongoing

Chege Mbugua MSc KU Proposal defended

Prisca Achieng MSc JOOUST Proposal writing

**High school teacher 1991 - 2012**

*Teachers Service Commission, Kenya, Full-time*

 Teaching of Physics and Mathematics in Kenyan high schools. Mastery of pedagogical skills

 founded on student-centred learning, hence the capacity to communicate complex ideas.

**SKILLS**

 *Languages* English (fluent)

 German (basic)

 Kiswahili (fluent)

 *Software* C++, LaTeX, ROOT, MicrosoftOfficeTM

**REFERENCES**

Prof. Dr. Markus Risse Dr. Nadir O. Hashim Prof. John Okumu

Faculty of Science and Technology Department of Physics Deputy Vice Chancellor

Department of Physics Kenyatta University Kenyatta University

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