

From an Architect's Dream to a Passion for Physics

I am a student obtaining my second physics course at the University of Kinshasa in the Democratic Republic of Congo. In addition to my studies, I have worked the popularization and promotion of science and women's leadership through several projects. I was born in the city of Mbuji-Mayi in the Province of Kasai-Oriental in the Democratic Republic of Congo. I completed my secondary studies at the Kasai General and Technical Secondary School, where I obtained my state diploma in 2017. When I was very young, I was drawn to math and science. I had, therefore, opted for the scientific section, specifically math-physics. Among my favorite subjects – besides math and science – was scientific drawing. I had heard of making sketches and designing houses. From then on, I devoted all my energy to making sketches and designing houses. I only dreamed of becoming an architect. Since my province was among the last to receive the results of the state exams, I experienced a great delay in my registration at the university after graduating. And, as I wanted to continue my studies in the capital, when I arrived in Kinshasa at the end of October 2017, the registrations had already ended in several universities – in particular the one where I was to register. This is where everything changed. It was for me the tragic end of a dream and the beginning of an embarrassment of choice.

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THE AFRICAN PHYSICS NEWSLETTER

Igle Gledhill

University of the Witwatersrand, South Africa

Advisory Board Chair

ASP 2024

*note: APN is careful to acknowledge images; All material in images in this presentation is from African Physics Newsletter

home

17 July 2024 UTC 08:32

W / Population / World / Africa

Africa Population (LIVE)

1,496,630,727

Universities: about 2500

<https://www.mining.com/wp-content/uploads/2020/02/true-size-of-africa.jpg>
<https://www.worldometers.info/world-population/africa-population>

~7700 km

~8600 km



origins

- 2017-2018
- Survey:
Physics in Africa
Collaboration of APS, IoP,
EPS, SAIP and ICTP*
- Significant finding:
Means of communication
across the continent needed
for physicists

* American Physical Society, Institute of Physics UK, European Physical Society, South African Institute of Physics, Abdus Salam International Centre for Theoretical Physics



Jim Gubernatis,
American Physical Society



Nithaya Chetty,
South African Institute of
Physics



realising the dream

- APS agreed to publish on a volunteer basis*
- Editors are all volunteers
- Advisory Board in place
- 2019 : Publication started
- **The newsletter is created by and for the African physics community**

*thank you: Amy Flatten and APS International Affairs!

Geophysical Surveys Cover North Africa's Sahara for Water Sustainability



Figure 1: Left, measurement of the Magnetotelluric east of Qattara depression (Moghra area). Right, photo of Maha Abdelazeem (PI) and M. Gobashy of the measuring team. (Photo Credit: The authors)



APN's goal

- bridge communication gaps between African physicists
 - within countries,
 - among countries and
 - between the continent and the world
 - Including the African diaspora

Entrepreneurship in Botswana: A Market Test Place for African Innovations



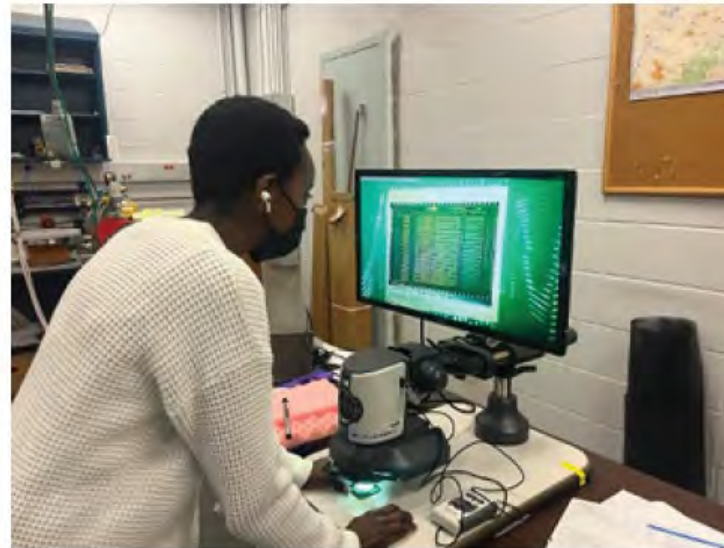
Figures 1 and 2: Photographs courtesy of BITRI. (Photo Credit: The author)



working model

- published quarterly
- physics news
- conference reviews
- physical society news
- life stories and interviews

My Journey from the African School of Physics to an Intern at Brookhaven National Laboratory



Examining the wire connections of the LArASIC chip

Figure 1: (Photo Credit: Lingyun Ke, Brookhaven National Laboratory)

Gloria Maithya

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What Can Physicists Do in Our Planetary Crisis?

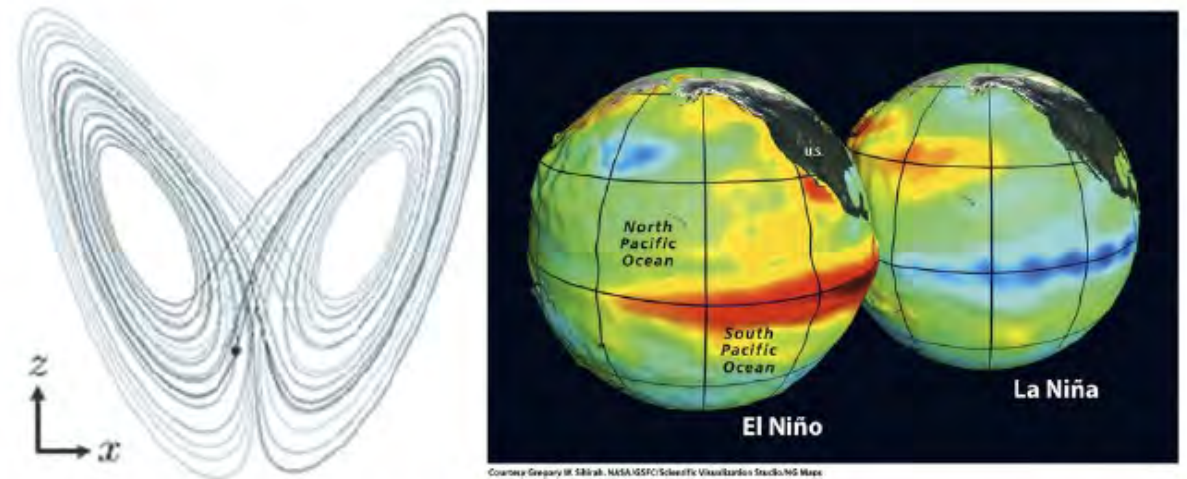


Figure 1a (left): The Lorentz attractor in phase space. Figure 1b (right): Sea surface temperatures - El Niño and La Niña currents. (Photo Credit: 1a, [Dan Quinn](#) - Own work, CC BY-SA 3.0; 1b, Courtesy Gregory P. [Shirah](#), NASA/GSFC/Scientific Visualization Studio/NG Maps)



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The 7th African School on Electronic Structure Methods and Applications

Kigali held the first post-COVID African School on Electronic Structure Methods and Applications (ASESMA) – a successful event marked by an impressive diversity of participants and promising perspectives.



Figures 1,2,3: (Left) Participants at ASESMA 2023, (Right Top) African countries represented by ASESMA students location, (Right Bottom) Countries represented by Lecturers and Tutors
Photo Credits: (Left) Garu Gebreyesus, (Right) Iurii Timrov via LinkedIn

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(Photo Credit: M'Passi Mabilia)

M'Passi Mabilia at the end of his teaching of a condensed matter physics course at the University of Science and Technology of Masuku in Franceville, Gabon.



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Space Scientist in Ivory Coast

The sickle-cell patient who became a space physicist.



Commission G



URSI GASS 2020 Young Scientist Award

Diaby, Aziz

Université Félix Houphouët Boigny, Côte d'Ivoire

Estimating the daytime vertical ExB drift velocities in the F-region of the equatorial ionosphere using the IEEY and AMBER magnetic data in West Africa

Figure 1: The URSI Young Scientist Award obtained by Aziz Diaby.
(Photo Credit: https://www.ursi.org/young_scientists.php)

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APS and APS International Affairs