

ASFAP— Letter of Interest

Push to Address Long-term Challenges for Young African in physics

Mounia Laassiri^{1*}, Benard Mulilo², and Diallo Boye³

¹Mohammed V University, Morocco

²University of Zambia

³Brookhaven National Laboratory

Primary Category: Young Physicists Forum

Secondary Category: Community Engagement

Subgroup categories: None

Did you / will you submit this LOI to another category? No

Contact Information:

Mounia Laassiri: mounia.laassiri@gmail.com

This feature letter of interest highlights the [workshop](#) organized by the Young Physicists Forum (YPF) in January 2022 and the preliminary results of the [survey](#) conducted by ASFAP— YPF.

The Young Physicists Forum (YPF) is a working group of the African Strategy for Fundamental and Applied Physics (ASFAP). The ASFAP— YPF was instituted to engage rising-star physicists to gather, study and debate the major issues in their research careers. The main objectives of the ASFAP— YPF are among others, to create a diverse continent of next-generation physicists to play an active role in collaborations pertaining to scientific research and educational issues in Africa. Furthermore, the ASFAP— YPF aims at developing the knowledge and skills of young African physicists, grooming them to acquire a fuller understanding of industrial, regional as well as global agendas. Since launching ASFAP— YPF in 2021, the forum has played an active role in identifying the challenges and remedies for young physicists to flourish in various physics fields. To this effect, the forum has so far conducted several virtual meetings to share the knowledge. In the just ended January workshop, for example, the forum invited stakeholders to discuss some of the challenges and opportunities for young African physicists.

The workshop brought together young physicist researchers and feature panelists, drawing almost 80 participants from all over Africa. During presentations and panel discussion, physicists detailed the challenges facing young African physicists; highlighted existing solutions; and brainstormed new strategies for research and policy.

Raising awareness of the challenges for young African physicists

Notwithstanding many positive signs that the conditions of scientific research and in particular fundamental and applied physics in African countries are improving, young African physicists still face a number of challenges remain in place that need to be addressed by the key stakeholders. A high level panel discussion chaired by ASFAP— YPF Co-conveners and included experienced panelists who included Dr. Ketevi Assamagan (Brookhaven National Laboratory), Dr. Lawalley Cole (CAFOR), and Dr. Raissa Malu (IIP), examined the challenges and opportunities for young African physicists. This panel debated on the different views to identify the challenges and motivations that shape young physicists’ career trajectories. Dr. Lawalley Cole said: "Since CAFOR is working at the continental level and is all-inclusive, we welcome further initiatives from youth-led organizations like ASFAP— YPF promoting African development and I looked forward to a very lasting working relationship with ASFAP— YPF to promote science and innovation in general and the subject of physics in particular in the African continent."

Designing and implementing practical solutions

Shortly after launching ASFAP, ASFAP—YPF team developed their own survey to capture evidence of the challenges facing young African Physicists. The survey, which was sent to African School of Physics Alumni, ASFAP Community and publicized on social media, garnered nearly 103 responses from more than 31 countries. Benard Mulilo, who is co-convenor at ASFAP— YPF, presented preliminary results at the workshop about the challenges young African face, reaffirming what has been shown on a smaller scale in other studies, either in particular African countries or within specific physics disciplines. This replication of existing findings on a larger scale will be important, he says, when ASFAP delivers its final report to various groups that help shape academic policies.

Result from one of the questions is presented below. A lack of research funding and funding for equipment were identified by all respondents as posing the biggest challenges.

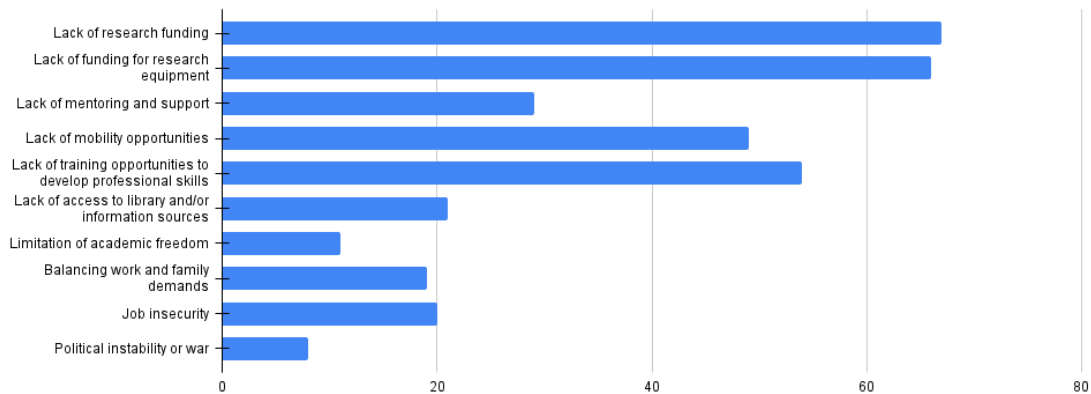


Figure 1: Impact of Challenges on Careers of YPF Africa respondents.

Making the most of the other regions of the world

The proliferation of engagement groups such as ASFAP— YPF signals that greater awareness, and real change, may finally be on the way. In parallel to the activities of this young African physicists forum, there are ongoing international activities in the United States known as Snowmass Early Career (SEC). Julia Gonski, a DPF Executive Committee Early Career Member drawn attention to the SEC activities and shared some ideas for long-term strategic plan.