ASFAP— YPF

Status & Plan

African Conference of Fundamental and Applied Physics (ACP2021)
March 07, 2022

@
Joint Session on Societal Engagements

Diallo Boye
Co-convener, Young Physicists Forum (YPF), ASFAP
On behalf of the ASFAP— YPF Team

Young Physicists Forum

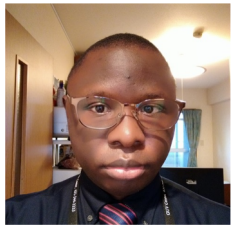
ASFAP

Young Physicists Forum

Current Co-conveners: Mounia Laassiri, Diallo Boye, Benard Mulilo
Mailing list: ASFAP-YoungPhysicists@cern.ch
Regular meeting: Wednesday at 05:00 PM UTC on Zoom

Dr. M. Laassiri
(UM5, MA)

Dr. D. Boye
(BNL, USA)

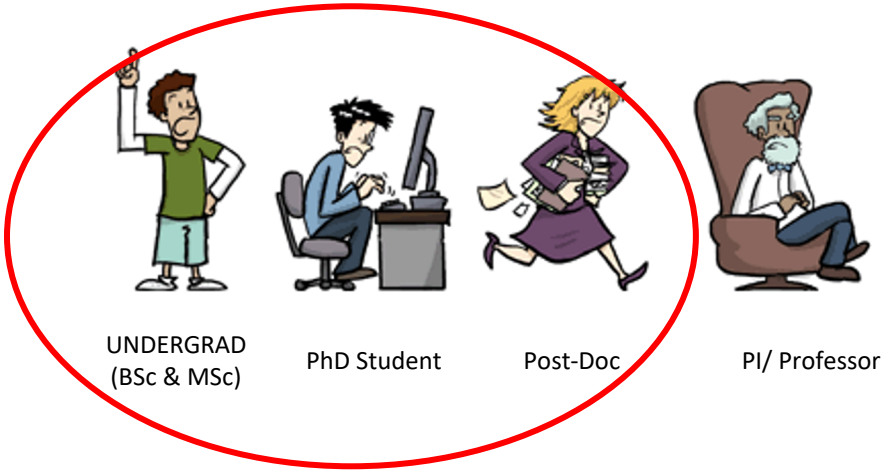


Dr. B. Mulilo
((UNZA,, ZA)

Overview of Young Physicists Forum (YPF)

- **Who we are:** Young African physicists brought together by ASFAP process.
  - "Young African Physicists" = Undergrad & grad students; postdocs, young physicists faculty, engineers (<~10 years post-PhD)

- **Encourage** leadership in young researchers in physics
- **Foster** physics among local communities and institutions
- **Connect** young physicists in Africa



Young Physicists Forum

For Young African Physicists

By Young African Physicists

ASFAP— YPF Past Activities

First YPF-wide meetings

Held on June 9, 2021: https://indico.cern.ch/event/1034900/

- Overview of the ASFAP process
- Introduction to Young Physicists Forum
- Q&A

...why ASFAP is promoting Young African Physicists?

Held on June 23, 2021: https://indico.cern.ch/event/1034902/

- Introduction co-convenors and members
- ...why ASFAP is promoting Young African Physicists?
- Q&A

ASFAP: YPF Survey

Held on July 07, 2021: https://indico.cern.ch/event/1034904/

- ASFAP— YPF Survey update
- Overview of LOI
- ASFAP CPM

These meetings have been recorded and provide a nice resource for people trying to get involved with the ASFAP process now.

ASFAP— YPF Past Activities

ASFAP: Young African Physicists' Workshop—Challenges and opportunities

Held on January 26, 2022: https://indico.cern.ch/event/1105184/

- ~ > 140 registrations & 80-90 participants
- Speakers (5)
- Panelists (3)

The purpose of the workshop was to bring together young physicists and panelists to discuss the challenges facing young African physicists; highlighted existing solutions; and brainstormed new strategies for research and policy.

ASFAP— YPF Survey

Survey Background

- Collecting opinions & experiences on careers, physics outlook, workplace culture, and scientific research on the African continent;
- Not just for young physicists! Seeking experiences of entire fundamental & applied physics community;
- Provide analysis of results;
- Produce a report to be presented and published;

Aims

- Raise awareness and advocate for change
- Identify specific obstacles to inform policy
- Collect preliminary data for further research

Take the survey here!
Deadline: Dec. 31, 2022.

ASFAP— YPF Survey

Survey Background

Sections

- **Section I** – Occupation and career development
- **Section II** – Education background
- **Section III** – Relationship with students' advisors
- **Section IV** – Research performance and collaboration
- **Section V** – Brain drain and how to counter it
- **Section VI** – Workplace prior to COVID-19
- **Section VII** – Personal information

73 Questions

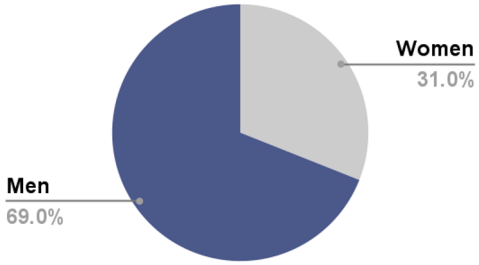
We were aiming for an unbiased approach to identifying challenges facing young African in physics, and we are extracting an incredible amount of useful information from the responses to the open questions.

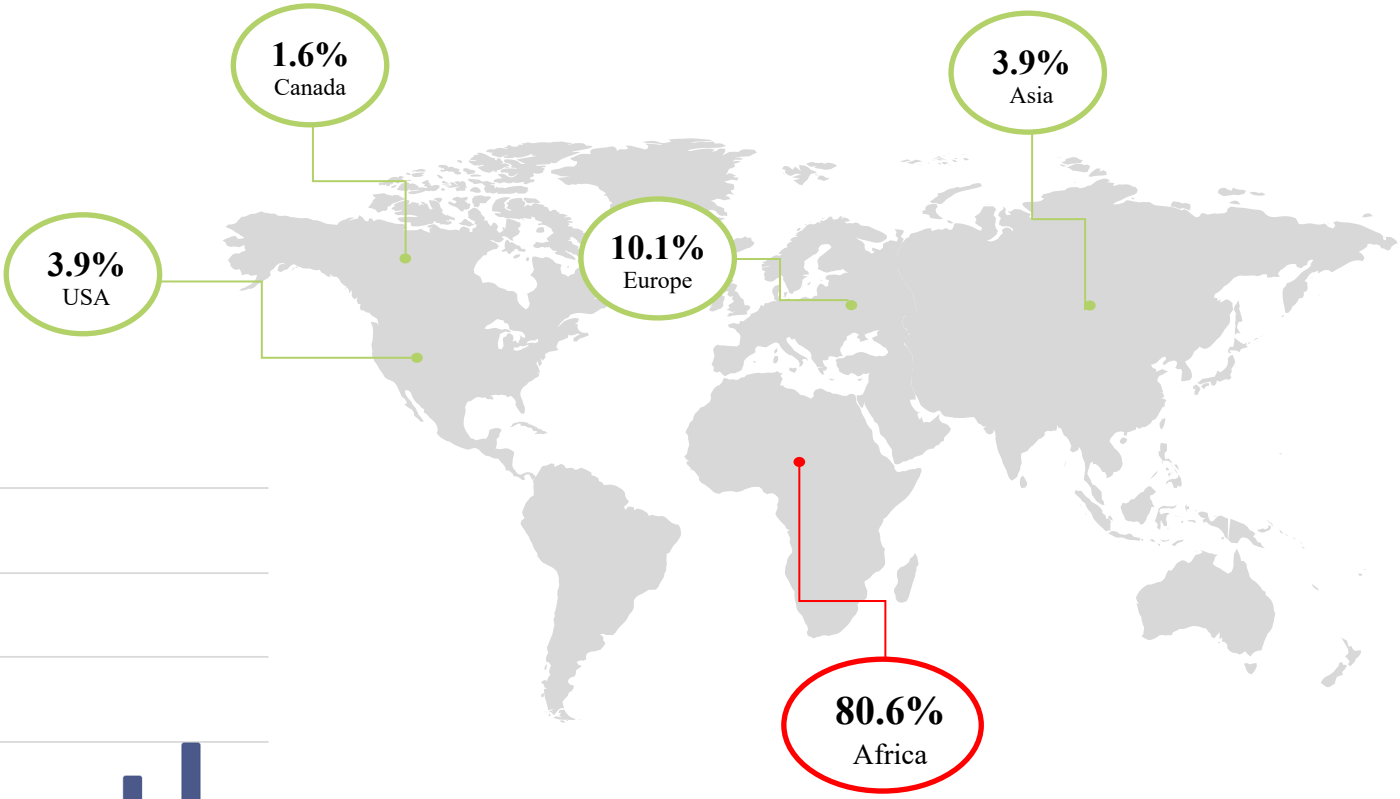
ASFAP— YPF Survey

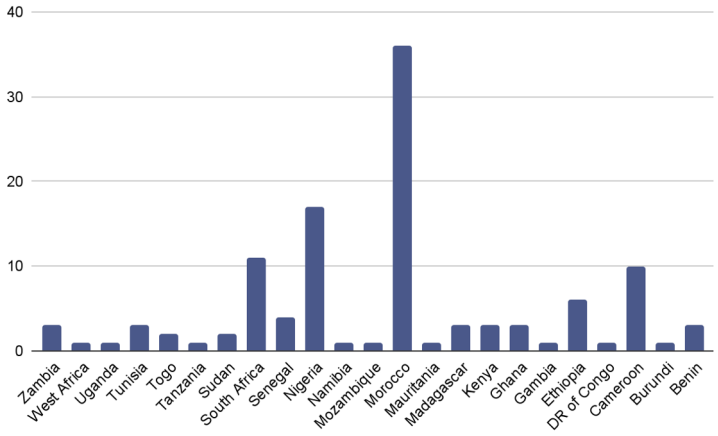
Survey Responses

Total number of respondents: 129

Countries represented: 37



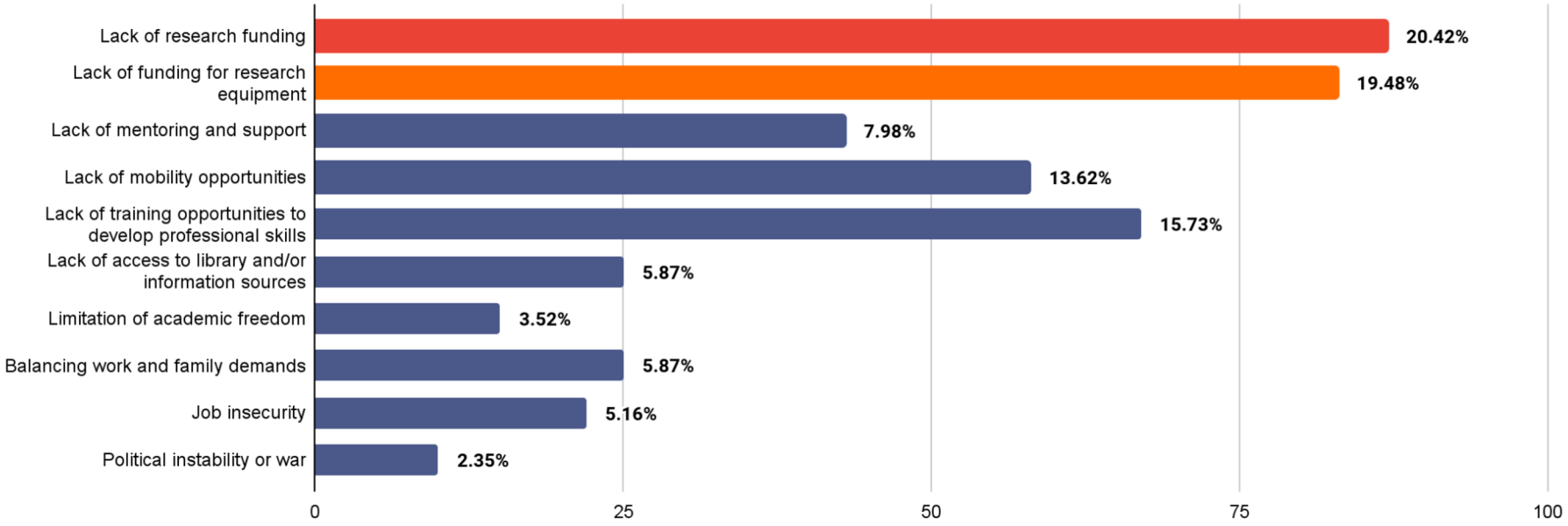




ASFAP— YPF Survey

The career challenges young African physicists face

A lack of research funding and funding for equipment were identified by all respondents as posing the biggest challenges.



Q: What are some of the challenges you faced in your university? Please select all that apply.

ASFAP— YPF Survey

Some prominent solutions to challenges young African physicists face

- Applied for research grants – buy equipment for research;
- Self-funding and money from relatives and foreign labs;
- Do part-time jobs to find funds for studies;
- Online training and internships, to learn more using virtual system.;
- Collaborating with other universities, companies, and funding organizations;
- Participation in conferences and seminars organized overseas;
- Open-minded and well linked advisor – engaged student's mobility;
- Hard Work, consistency, perseverance, sacrifice, and determination;
- Resorted to theoretical work instead of experimental work due to lack of experimental equipment and facilities;
- Worked hard to finish undergraduate and left for overseas (i.e. Europe).

ASFAP— YPF LOIs

Letter of Interests (LOIs)

- **Challenges facing young African physicists in their research careers: postdoctoral opportunities in Africa—** Mounia Laassiri

  This LOI addressed some of the challenges facing young African physicists in case they are able to get a postdoctoral fellowship at African research institutions:
  - Lack of support, mentorship & guidance
  - Lack of funding
  - Grant writing

- **Push to Address Long-term Challenges for Young African in physics—** Mounia Laassiri et al.

  This LOI highlights the workshop organized by the YPF in January 2022 and the preliminary results of the survey conducted by ASFAP— YPF:
  - Raising awareness of the challenges for young African physicists
  - Designing and implementing practical solutions
  - Making the most of the other regions of the world

- **ASFAP— YPF: Going Beyond the ASFAP Process—** Mounia Laassiri et al.

  Community Feedback:
  - The establishment of a representative group for the YPF community is needed beyond the ASFAP process;
  - YPF should keep the goals of representation on ASFAP and ASFAP— YPF survey, and add efforts on other key initiatives for the long term;
  - YPF representatives for each ASFAP— PWG would benefit the YPF community and the ASFAP process.

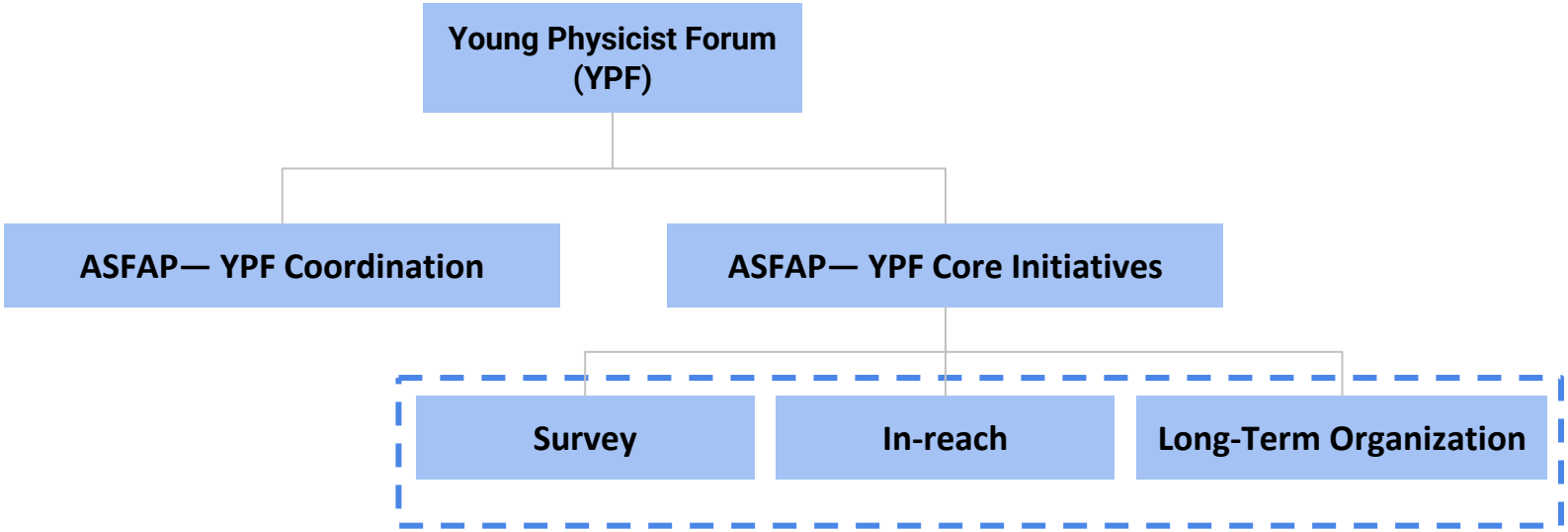
ASFAP— YPF Plan

Community Feedback

General points of consensus from the town hall, ASFAP— YPF workshop, and ASFAP— YPF meetings.

- The establishment of a representative group for the YPF community is needed beyond the ASFAP process,
- YPF should keep the goals of representation on ASFAP and ASFAP— YPF survey, and add efforts on other key initiatives for the long term,
- YPF representatives for each ASFAP— Physics working group would benefit the YPF community and the ASFAP process.

Two arms of the organization:



ASFAP— YPF Plan

ASFAP— YPF Coordination

Coordinate with the ASFAP— Physics working groups and help get young African physicist members involved in the ASFAP process.

- ➔ Attend main ASFAP— PWG meetings and interact with PWG co-conveners;
- ➔ Help push key YPF initiatives within the ASFAP— PWG;
- ➔ Help connect YPF members to ongoing work/projects in their ASFAP— PWG that they might be interested in contributing to.

- **Structure**:
  - 2-3 coordinators per ASFAP—PWG at a time

ASFAP— YPF Core Initiatives

2 new core Initiatives:

- ➔ **In-reach**: Professional development and building cohesion within the YPF community.
- ➔ **Long-Term Organization**: Define the long-term structure of the young African physicists organization after the ASFAP process.

- **Structure**:
  - 2-3 conveners per core initiative at a time

ASFAP— YPF Plan

ASFAP— YPF Core Initiatives

In-reach

- **Reaching/engaging all young African physicists within the ASFAP community**
  - Introductory workshop series
    - To provide better understanding of the ASFAP process and the goals of each ASFAP—Physics WG
  - ASFAP— YPF Network
    - To facilitate communication and advocacy for common issues
  - ASFAP— YPF Wiki Page Update
    - https://twiki.cern.ch/twiki/bin/view/AfricanStrategy/AfYoungPhysicists

- **Reaching within ASFAP— YPF and promoting participation**
  - ASFAP— YPF LOI/ White Paper database
    - To help track the impact of YPF members in the ASFAP process
  - Colloquium series
    - To better understand the "big questions" in the fields beyond their own specialty

Long-Term Organization

- **Long-term YPF representation**
- **Fostering a multidisciplinary community within Fundamental and Applied Physics**
- **Pursuing initiatives for the benefit of YPF community**

ASFAP is a community process— Get Involved!

ASFAP-SteeringCommittee@cern.ch

www.africanphysicsstrategy.org/

ASFAP-LinkedIn

@StrategyAsfap

ASFAP-TWiki