Pan-African Physics Roadmap—Community Discussion
October 19, 2021 at 13:00 UTC / 15:00 CAT

Introduction — General Information. The code of conduct

https://docs.google.com/document/d/1eliKD1LBVtVcKkAaWJ5W4VMy_x7i7JS2pEuTgGpudis/edit#heading=h.ecp3r7c1vr2d

- Share the stage
- Be concise and on point
- Use the raise-hand button and wait to be called
- Mute when you are not talking
- Put further questions / answers in the chat window

A. First Round, slides presentation

- About the “Current Status and Plan” of ASFAP, by Dr. Fairouz Malek (20 min),
- 5-min questions / answers

B. Second Round—Panel Discussion (60 min)

First round of questions to the panelists

1) **Prof. Peter Jenni**
   Physics roadmap developments are carried out periodically in other parts of the world. You have been most familiar with the European physics strategies. Please tell us the importance and benefits of grassroots, community-driven strategies.
2) **Prof. Fernando Quevedo**
   Recently, Latin American countries completed their first major, concerted, physics strategy. How did they manage?
   Additional comments by Prof. Peter Jenni
3) **Prof. Farida Fassi**
   In Africa, strategies or science roadmaps were developed. For example, the UA Agenda 2063; the African Academy of Sciences has science strategies. Large collaborations or professional physics societies have strategies. This new effort, the African Strategy, aka. ASFAP, how is it different? What more would ASFAP bring?
4) **Prof. Mirjana Povic**
   The African Astronomical Society (AfAS) has the mandate to support astronomy development across Africa. Tell us a bit about that and how a larger pan-African Strategy in ASFAP could support AfAS initiatives.
5) **Dr. Marie Chantal Cyulinyana**
   You have been involved in the Rwandan Association of Women in Science and Engineering (RAWISE). Tell us about that. In particular, what has been RAWISE's strategy for success and the support from policymakers?
6) **Dr. Gopolang Mohlabeng**
   You are an African early career physicist. The African Strategy has a dedicated working group on Young African Physicists. Please tell us in your views, the importance of mobilizing early-career voices in the ASFAP development.

   ** One very important reason to listen to the needs of early career members is human capacity development. We need to take into account the grievances and problems that young researchers have in our institutions in Africa in order to retain them for leadership positions in the future. In situations where young people feel like their needs are not met or that they are not supported, they will move to 'greener pastures'. This will result in Africa losing its brilliant young minds. We want to support early career researchers so that leadership positions in organizations, at Universities where key decisions are made, and at funding agencies will be taken up by African physicists, in the future, who understand the needs that their fellow colleagues have and what is required to turn Africa into a physics powerhouse.*

Questions / Answers from the audience (10 min)

Second round of questions to the panelists

1) **Prof. Peter Jenni**
   In this African Strategy development, we are asking for broad community inputs in forms of Letters of Interest. Please tell us why community consultations and inputs are important.
2) **Prof. Fernando Quevedo**
   Successful community-driven strategies require community buy-ins and endorsements. Please tell how Latin American countries succeeded in multi-country community buy-ins and ministerial endorsements?
   Additional comments by Prof. Peter Jenni
3) **Prof. Farida Fassi**
   Who are the mandating bodies of the African Strategy and what endorsements do you have to develop the African physics strategy?
4) **Prof. Mirjana Povic**
   In the African Strategy, you are a convener of the Astrophysics and Cosmology working group. Activities are starting well in this working group. Tell us a bit how it is going and what your plans are?
5) **Dr. Marie Chantal Cyulinyana**
   Please tell us what experiences from RAWISE would be useful for the Women in Physics working group of the African Strategy?
6) **Dr. Gopolabg Mohlabeng**
   What are some of the challenges facing early career African physicists that you would like to see developed in this strategy?

   ** I think that in many situations, decisions are made without the involvement of early career researchers, and these decisions usually impact them and their careers. Going forward, involving young researchers in the decision making processes can help in developing better ideas that improve the entire community, but this also can serve as training for the young researchers in terms of the decisions they have to make when they are in leadership positions in the future.*

   ** A very big challenge facing early career researchers is job security and stability. Students, who recently graduate don't know where their next postdoc is coming from, postdocs don't know if they will ever get hired as faculty or if they will have to continue doing postdocs until they decide to leave the field. This usually coincides with having to take care of extended family back home or immediate family in terms of spouse and children. And on top of all this the salaries are not usually enough to cover expenses. PI's need to find a way to pay postdocs and students at an acceptable/livable rate.*

** A more friendly and approachable environment. Academia is an environment of hierarchy, there is the student (who usually doesn't have a voice), the postdoc (who has a small voice, but has no decision making power) and the professor (who has all the voice and all the decision making power). Making research groups more accessible and more collaborative, empowers young researchers to find their voices, allows them to defend their work and sometimes have fruitful debates with their mentor, which can be helpful also for the mentor. Hierarchies will always be there, but removing/lowering such barriers especially in Africa, will help in training more confident young researchers who can stand on their own two feet, regardless where they go.*

** For those early career researchers in faculty positions, it is important to not overwhelm them with sometimes unnecessary committees that do not help in advancing their careers. Sometimes early career members find it difficult to find allies who can help guide them through the difficulties of academic life. For instance, its very difficult for an early career researcher when they don't know who to talk to if the student they are mentoring is facing difficulties or is just not performing. In the end it the researcher may be blamed for not doing a good job. Yet, it is the responsibility of the department to make sure that both the student and the researcher are successful.*

Questions / answers from the audience (10 min)

C. Concluding Statements (<=5 min)

1) **Prof. Fernando Quevedo**
   In your experience as former Director of ICTP, considering all the projects that you initiated and supported in Africa and developing countries, and in your capacity as a Member of the International Advisory Committee of ASFAP, what message / advice would you give us as we develop this strategy further?
2) **Prof. Peter Jenni**
   As a former Spokesperson of the ATLAS Experiment, you have promoted the participation of African institutes / countries in major scientific experiments at CERN. You are currently serving in the Observers Committee of ASFAP. What things should we improve upon so far?