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## Physics for Development, Education and Outreach

*Friday, 8 July 2022 14:00 (45 minutes)*

In 2015, countries adopted the UN 2030 Sustainable Development Goals as a universal call to end poverty. Poverty is considered as one of the greatest challenges to sustainable development in Africa as approximately 80% of people in extreme poverty are located in Sub-Saharan Africa. The lack of proper education, jobs, infrastructures, and clean water are among the main factors contributing to perpetuating poverty in Africa. Africa, with the youngest and fast growing population, with more than 60% of the world's arable lands and 30% of the world's minerals should not be lagging behind other continents in development. One of the ways to unlock Africa's potentials is education by addressing the existing gaps in needed skills in science and technology. Community awareness programs about environmental problems and cultural bias on girls' education are also needed to achieve sustainable development in Africa.

An important key step in education is improving the teaching and learning of physics in Africa. Physics as the basis of all applied sciences can help in breaking the cycle of perpetual poverty in Africa by building sustainable renewable energy systems and finding solutions to social and environmental problems including water pollution and climate change. However, this cannot be achieved without the collaboration and communication between all stakeholders namely local communities, the scientific community, policymakers and international partners.

This talk will focus on the activities and plans of the African Strategy for Fundamental and Applied Physics (ASFAP), an initiative launched by African Physicists living and working in different countries around the world in November 2020 with a vision to unlock Africa development through improved Physics education and research capabilities. Amongst ASFAP objectives are encouraging and strengthening physics education in schools (secondary and tertiary), young scientists capacity building, innovating scientific research and collaboration between countries, engaging the community through outreach programs, influencing directions of science strategies taken by policymakers and creating a proper cultural environment and conditions in which science in Africa can prosper. In summary, ASFAP is a community-drive scientific initiative to define the most impactful strategic directions for sustainable development in Physics education and research in Africa.

### Apply to be considered for a student ; award (Yes / No)?

No

### Level for award;(Hons, MSc, PhD, N/A)?

N/A

### Consent on use of personal information: Abstract Submission

Yes, I ACCEPT

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