

The joint virtual event of the African Light Source AfLS4-2022 and the African Physical Society AfPS2022



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A Centre of Excellence in Planetary Space Science and Technology in Africa

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Planetary and Space Science and Technology (PSST) has been identified as a key area of investment in Africa as it provides graduates and young scientists with both the necessary soft and practical skills to face 21 st Century challenges, such as digital innovation. PSST for Africa means not only blue-sky research and skilled graduates in STEM disciplines but is intricately linked to socio-economic development. Many countries have already seen the benefits arising from PSST technology and industry for agricultural projects (SDG 2-Zero Hunger), earth observation, communication networks, monitoring/prevention of disaster and geohazards (SDG 13-Climate Action), space defence and telemedicine amongst others. It has been demonstrated that developments in PSST help the scientific community to address trans-boundary issues related to developmental and environmental problems, such as water management, and can consolidate international relationships, promote collaborations and optimize the use of limited funds. Research teams in PSST are often at the forefront of the application of cutting edge technologies for the solution of complex scientific problems such as the habitability of extraterrestrial worlds.

PSST is bound to create in Africa highly skilled jobs that are needed for socio-economic development on a continent that is rapidly embracing the 4 th industrial revolution.

Here I will present ongoing pan-African actions aiming at: i) increase the accessibility to STEM in African HE; ii) modernize existing PSST programmes in collaboration with industry and policy makers; iii) foster the internationalization of PSST teams and institutes; iv) promote standardization of PSST in Africa to support the mobility of students.

To achieve these ambitious goals we are working at the creation of a Centre of Excellence in PSST (CESST) which will host a virtual platform to increase accessibility to education and training materials whilst also coordinating collaborative actions.

Moreover, PSST has the potential to inspire young Africans and attract them towards STEM higher education programmes. PSST can excite the imagination of the public and stimulate the interest of young and old alike, especially when combining cutting edge discoveries with traditional knowledge.

Presenter: Prof. FRANCHI, Fulvio (BIUST)

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