Professor Francis Kofi Ampenyin Allotey Obituary

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Professor Francis Kofi Ampenyin Allotey, one of Africa's most influential physicists who founded the African Physical society died on Thursday 2 November.

Francis Allotey was born in the Central Region of Ghana on August 9 1932, and studied at Imperial College before obtaining his master's and doctorate degrees at Princeton University. He declined to take part in the diaspora of African scientists who sought academic positions abroad, but rather returned to Ghana where he became a key leader in the promotion of physics nationally, serving in a senior capacity as President of the Ghana Institute of Physics, Chairman of the Ghana Atomic Energy Commission, and President of the Ghana Academy of Arts and Sciences.

He saw from an early stage in his career the great potential of African students in physics and mathematics, and was instrumental in bringing international attention to the urgent need to support science education and research in developing countries to avoid an irreversible brain drain of talent. His influence grew through his appointment as a member of the Scientific Council of the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste, Italy in 1996, where he served for over 20 years as a trusted advisor to the Directors that followed after the late Prof Abdus Salam. In addition to advising the ICTP on its programs for scientists throughout the world, he provided an important connection between the United Nations system and African scientists, particularly in the leastdeveloped Sub-Saharan region. He served as a consultant to the International Atomic Energy Agency (IAEA) in the 1970s, focussing particularly on issues of non-proliferation. He was also instrumental in working with the United Nations Educational, Scientific and Cultural Organisation (UNESCO) to mobilize international partnerships to see to fruition the International Years of Physics in 2005 and the International Year of Light in 2015 which were declared at the UN General Assembly. Indeed, it was Francis' personal intervention in the spring of 2012 – while attending a meeting of the Scientific Council of ICTP and understanding the importance of meeting tight UN committee deadlines – that he changed his travel plans to head to Paris to personally ensure that Ghana's diplomatic services placed the proposal for the International Year of Light before UNESCO's Executive Board. Francis was extremely happy to see Ghana take a lead role in this initiative; in a 2015 interview on CNN's African Voices he proudly remarks "...because of this little nation, this year has been declared the International Year of Light." More recently, he worked with UNESCO to have May 16 (the date of first operation of the laser) recognized as a permanent and annual celebration of science in the form of an International Day of Light.

Development was what he had in mind always for Africa and he knew where he had to focus first— Africa's youth. He also understood the need for a broad brush, from advanced physics to applied technologies to the training of teachers who feed the pipeline of future scientists. Indeed, Allotey helped to bring to Ghana the first of a series of workshops organized jointly by UNESCO and ICTP for teachers: *Active Learning in Optics and Photonics* (ALOP). Eugene Arthurs, CEO of the International Society of Optics and Photonics (SPIE), which supported the program from that first time in Ghana onward, made a simple remark on Francis' passing that will resonate with those who knew him, and reveals one of the keys to his success: "Francis had a wonderful charm to match his brilliance." Francis Allotey's global influence continued as Vice President at large of the International Union of Pure and Applied Physics (IUPAP) and as an honorary fellow of the Institute of Physics (IOP). He was also a Fellow of the Nigerian Mathematical Society and had received many other international honours. Always rooted in Africa, he was a founder and trustee of the African Institute of Mathematical Sciences (AIMS), Ghana, and notably was the founding President of the African Physical Society (AfPS) which was launched in Senegal in 2010. Its goals, in Allotey's words, were to "promote and further research in physics and its applications in order to enhance technological, economic and socio-cultural development in Africa." Allotey was continuing to work toward that goal during 2017, having travelled to Europe on the day he died to participate in the UNESCO General Conference.

Francis was, in our opinion, the most recognizable voice for Physics within the entire African continent. He was a kind and highly-principled man with a ready smile who will be greatly missed by his friends and family. His work will live on through the organisations and institutes that he founded, and he also leaves a remarkable human legacy in the thousands of students and colleagues who have been inspired by his example. We will remember him with great fondness.