M.N. HOUNKONNOU WINS RAO PRIZE

by **Cristina Serra**

Benin mathematician honoured for high-level research and his commitment to maths education and training.

Mathematics is not only about calculations. It is also about applications in many disciplines, including physics, oceanography, health, management of water and ecosystems, climate studies and energy issues.

Mahouton Norbert Hounkonnou, a 2004 TWAS Fellow and a professor of mathematics and physics at the University of Abomey-Calavi in the Republic of Benin, is well aware of this. In fact he has always offered training to students, to help them develop critical thinking and problem-solving attitudes in various fields.

For the outstanding level of his research in mathematics and his sustained commitment to mathematics education, Hounkonnou was awarded the 2016 C.N.R. Rao Prize for scientific research.

"The C.N.R. Rao prize is an important recognition of more than 20 years of research activity," said Hounkonnou. "It is also a sort of encouragement and motivation to continue in the same direction, doing good research and promoting younger people in science."

The prize was announced on 14 November in Kigali, Rwanda, during the opening ceremony of the 27th TWAS General Meeting. TWAS Founding Fellow and former President C.N.R. Rao offers the award to celebrate high-impact scientific research carried out by scientists from Least Developed Countries.

▼ M.N. Hounkonnou

Hounkonnou is an accomplished mathematician and an undisputed authority also in theoretical physics, where he explores noncommutative and nonlinear mathematics, nonassociative algebras, nonlinear systems, noncommutative field theories and geometric methods in physics. He was the first to provide a resolution to some challenging mathematical problems.

How did he develop such a passion for maths and science? "I belong to a family where my eldest brothers and sisters are scientists, so they also contributed to build in me a passion for mathematical sciences, including theoretical physics," he explained in an interview.

Hounkonnou is the founder of the International Chair in Mathematical Physics and Applications (ICMPA-UNESCO Chair) of the University of Abomey-Calavi, which selects African students from over 13 French- and English-speaking countries to follow graduate programmes. He is also a visiting professor at African, Asian, European and North American universities, and the supervisor of more than 32 PhD and 31 master's degree students.

Commenting on his engagement in education, he said: "Training in mathematical physics is important as it prepares students to eventually move into a career in almost any of the areas where technical, physical and mathematical expertise is in high demand." That skill can be combined to address human challenges across a range of important fields. ◘

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