

Jean, friend and scientist



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Session devoted to
Jean's memory

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Jean Willy André Cleymans (1944 – 1921)

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Jean Cleymans, one of the pioneers in the study of ultra-relativistic heavy-ion collisions and a leader of the South Africa – CERN Collaboration.

Jean was not only a most distinguished theorist in the field of high energy nuclear collisions; he also played a crucial role in establishing and operating several large international collaborations, bringing together CERN, Dubna, GSI, iThemba labs, and a number of universities.

He had initiated and played a leading role in establishing the South Africa - CERN and South Africa – JINR Dubna program, and the participation of South Africa in the ALICE collaboration.





In 1986 he moved from Bielefeld (Germany to Cape Town, where in 1988 he was appointed as Full Professor of Theoretical Physics. The development of theoretical physics there, the training of young students in high energy physics, and the connection of South Africa to international research is to a very large extent the work of Jean.





Jean made seminal contributions to numerous areas in heavy ion physics. Of particular impact was his work on the statistical description of hadron production in nuclear collisions; his pioneering work effectively started the approach. He published more than 300 papers in leading physics journals.





Jean has been instrumental in organizing numerous conferences and workshops in the field e.g. SQM 2004 in Cape Town. Jean has organized well-received meetings in South Africa, bringing experts from throughout the world there and establishing connections with South African researchers.



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Jean has done much to make the field attractive to students and young scientists. He was an inspiring and passionate teacher and supervised 24 M.Sc. and 17. Ph.D. candidates. “One of his former postgraduates and long-time collaborators, Azwinndini Muronga, now the dean of Science at Nelson Mandela University, remembers Jean as having *“qualities of excellence and humanising pedagogy – excellence with purpose”*.”



By joining the ALICE Collaboration and establishing first the UCT-CERN Research Centre and then the national South Africa–CERN program, he reached even more students, researchers, and academics. Even after becoming Professor Emeritus of the University of Cape Town in 2010, Jean continued to lead these initiatives and saw them grow into a vibrant high-energy physics community in South Africa with strong links to CERN.

And as about scientist:

The confirmed success of thermal description of particle production in heavy-ion collisions and their energy and system size dependence, which provide a baseline for a detailed understanding of high-density QCD matter and its phase diagram, can be attributed to a large extent to seminal works of Jean Cleymans