

Gianluigi Casse has a long research experience in instrumentation for high energy physics. He has given fundamental contributions to the conception, design, deployment and operations of experiments for particle physics. He is a leading scientist in the field and made substantial contributions to important experiments like CDF at Fermilab (Batavia, IL, US), ATLAS and LHCb at CERN (Geneva, CH). He started his career in the INFN-Torino to move to the Experimental Physics group at CERN where he pioneered studies for radiation hardening of silicon devices for high energy physics applications. He joined the Particle Physics (PP) group of the University of Liverpool where he is now professor of physics. He had a key role for the design of major systems for experiments at the energy frontier (LHCb-VELO and ATLAS-SCT). He has lead the detector group of Liverpool PP and was the Head for the R&D for several years. He moved to Trento, where he has been for two mandates (from 2016 to 2021) the Director of the Centre for Sensors and Devices of the Fondazione Bruno Kessler (FBK-SD), which covers frontier research and promotes high-end innovation in a range of subjects like advanced silicon devices and labs on chip, microsystems, MEMs, functionalised materials, superconductive devices and nanotechnologies.

He is the Co-Spokesperson of the CERN/RD50 experiment (over 450 scientists worldwide) and member of the ICFA (International Committee for Future Accelerators) panel for instrumentation, to promote continuity of research in High Energy Physics detector and methods and for organising the strategy for the teaching of the subject.

He has authored or co-authored over 700 publications in refereed international scientific journals.