

Keijo Kajantie

Recipient of the Academy Award 2008

Keijo Kajantie was professor of theoretical physics at the University of Helsinki over the period 1973–2008, a stretch of almost 40 years that included a 5-year appointment as a research professor with the Academy of Finland and several visits of more than a year at a time to the European particle physics research centre CERN. Professor Kajantie is an extremely versatile physicist whose naturally inquisitive attitude to life has led him to encourage the introduction of a number of new branches of the subject into Finland, and he is also an accomplished teacher who has supervised innumerable doctoral theses and whose former students have in many cases themselves become professors in Finland or abroad. He has had a considerable influence on research in Finland and internationally, and has held numerous honorary positions in academies of science, scientific societies and funding organizations in this country and overseas.

Keijo Kajantie's own field of research is concerned with the systems of structural elements making up the nucleus of the elementary particle or atom. In other words, he is interested in particle theory and the behaviour of quarks and gluons under extreme temperatures and has studied the plasma that arises from heavy ion collisions occurring at close to the speed of light in a particle accelerator. He has also considered the behaviour of elementary particles under the conditions of extremely high temperature and density that occurred in an early stage in the formation of the universe. Many of these works that have delved into the fundamental principles of particle theory have attracted substantial attention internationally. His research has very largely made use of analytical and numerical methods and has called for an exceptionally broad-based grasp of the problems involved.

Tuija Pulkkinen