

The Körber European Science Prize

Trustee Committee

Prof. Dr. Felicitas Pauss

Swiss Federal Institute of Technology Zurich (ETH Zurich), Switzerland



Photo: ETH Zürich /
Heidi Hostettler

Felicitas Pauss obtained her PhD in theoretical physics and mathematics (summa cum laude) at the University of Graz (Austria) in 1976. In 1978 she took up a position at the Max-Planck Institute in Munich (Germany), where she moved to the field of experimental particle physics. She continued her research at Cornell University (USA) and CERN (Geneva, Switzerland) before being elected professor at ETH Zurich in 1993, where she directed the Institute for Particle Physics from 1997 till 2007. From January 2009 till March 2013 she was in charge of CERN's International Relations, reducing her ETH employment to 20%. In April 2013 she resumed her activities at ETH and took up the function of adviser to the ETH president on international affairs. In June 2013 she was elected president of the Faculty Conference of ETH Zurich.

Besides lecturing at the undergraduate and graduate level at ETH Zurich, her research activities concentrate on two main research fields: particle physics at the high-energy frontier and astroparticle physics, addressing fundamental open questions about the structure of the Universe and the underlying mechanisms that govern its evolution.

She has been member of the CMS collaboration since the early 1990's and also fulfilled important management duties within CMS. She has strongly contributed to the design and construction of the CMS experiment. CMS is one of the two large detectors at CERN's Large Hadron Collider with which the Higgs Boson was discovered in 2012. This discovery was recognised as important experimental input for the 2013 Nobel Prize in physics. By September 2013, Felicitas Pauss has published more than 700 scientific papers, resulting in about 44'000 citations (h-index = 95). She gave about 450 talks at international conferences, colloquia and seminars as well as presentations for government officials, funding agencies and the general public.

Felicitas Pauss has served and still serves on numerous national and international scientific advisory boards. She has received the "Grand Decoration of Honour" of the Federal Province of Styria (Austria), the "Cross of Honour for Science and Art, First Class" of the Republic of Austria and obtained the Erna Hamburger prize of the EPFL-WISH foundation. She is member of the German Academy of Science Leopoldina.