

## Jean-Pierre Revol Engineer and Physicist

Jean-Pierre <u>Revol</u> received an engineer degree from the French Ecole Nationale Supérieure des Arts et Métiers (1972), a "Licence de Mathématiques" from Paris VI University (1973), and a Ph.D. in particle physics from MIT Physics Department (1981).

As an MIT graduate student, he contributed to the discovery of the gluon (1979), with the Mark-J collaboration at DESY, Hamburg, in the team led by Nobel laureate, Samuel Ting.

As a CERN fellow, he contributed to the discovery of the W and Z weak bosons (1983), with the UA1 collaboration at CERN, in the team of Nobel laureate Carlo Rubbia.

As an assistant professor (1984-1989) and associate professor (1989-1991) at MIT Physics Department, Jean-Pierre and his group contributed to the UA1 experiment at the CERN proton-antiproton collider.

From 1991 to 1993, Jean-Pierre served as scientific advisor to CERN Director General Carlo Rubbia. During these years, he played a major role in the proposal of sending a neutrino beam (CNGS project, approved by CERN Council in 1999) from CERN to the Italian Gran Sasso underground laboratory situated 730 km away.

From 1993 to 2000, Jean-Pierre contributed to Carlo Rubbia's Energy Amplifier project, especially, to the pioneering CERN experiments FEAT and TARC (Technical Coordinator).

In 2000, Jean-Pierre took the leadership of the CERN Team in the ALICE (A Large lon-Collider Experiment) collaboration at LHC, studying a state of matter named quark-gluon plasma. He coordinated the first proton-proton collision physics with ALICE and later became coordinator of the Physics Working Group on diffraction and ultraperipheral ion collisions.

From 2005 to 2010, Jean-Pierre coordinated relations between CERN and several non-CERN member state countries (in particular, Pakistan and Egypt), and from 2011 to 2014 he served as a member of the Technical Advisory Committee of COMSATS (Commission on Science and Technology for Sustainable Development in the South).

Jean-Pierre is a co-founder of iThEC, a non-profit Swiss association promoting R&D on thorium technologies and acted as its first president from 2012 to 2019.

After his retirement from CERN, he proposed, designed and built a new detector (AD) to extend ALICE capability to diffraction physics.

Jean-Pierre is a co-founder of Transmutex (2019), a Swiss company with the main goal of transmuting long-lived nuclear waste, producing carbon-free energy and at the same time generating fuel for PWR. Since then, he has been chairing Transmutex Scientific Board.