



2012 André Lagarrigue Prize

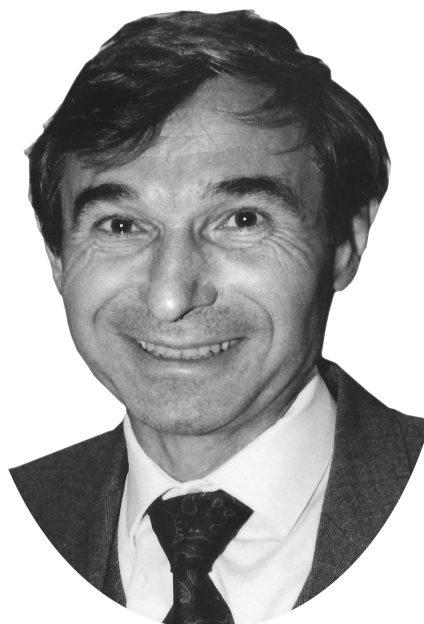
The international jury¹ of the André Lagarrigue prize, meeting under the chairmanship of Jacques Martino, director of IN2P3, has awarded the 2012 prize to **Jacques Haïssinski**, professor emeritus of physics at the Université Paris-Sud. The award, established in 2005 under the aegis of the French Physical Society, pays tribute to Professor André Lagarrigue, director of the Laboratory of Linear Accelerator (LAL, Orsay) from 1969

to 1975, who had a major role in the discovery of neutral weak interactions with the Gargamelle bubble chamber at CERN, thus establishing the validity of the electroweak theory. The award, co-funded by the CEA, CERN, Ecole Polytechnique, IN2P3-CNRS, LAL and Université Paris-Sud, is awarded every two years.

Born in 1935, of French citizenship, a graduate of the Paris Ecole Normale Supérieure, Agrégé in Physics, Jacques Haïssinski obtained his Ph.D degree at the University of Paris in 1965 after a Master of Sciences at Stanford University (USA). He began his career at LAL Orsay and his work has focused for the most part on the electron-positron colliders and particle physics that is accessible with the electron-positron, electron-photon and photon-photon collisions. Since 1996, he turned to observational cosmology, and contributed to the EROS experiment and the Planck space mission.

Combining experimental and theoretical approaches, Jacques Haïssinski is a pioneer in the field of e^+e^- colliders, where he has worked since the advent of AdA, in which collisions between the electron and positron beams were observed for the first time. Then, on ACO - the Orsay collider, the first strong focus ring -, SPEAR - at SLAC -, DCI - the double ring of Orsay -, SLC - the SLAC linear collider -, his work has focused on all aspects of e^+e^- colliders from theory to realization: synchrotron radiation, processes affecting the size and lifetime of the beams, factors limiting the luminosity, techniques to control the beams and measure the luminosity. Most recently, with his deep knowledge of the complexities of low-energy rings, he engaged in the design of the ThomX project, compact source of X-rays produced by Compton scattering of an intense laser onto an electron beam stored in a ring.

The contributions of Jacques Haïssinski to particle physics domains opened by e^+e^- colliders, focused particularly on the study of vector mesons, hadronic vacuum polarization, higher-order quantum



¹ J. Martino (IN2P3, president), P. Bloch (CERN), J.-C. Brient (Ecole Polytechnique), J. Iliopoulos (ENS - Paris), G. Kalmus (RAL), M. Lannoo (SFP), D. Leith (SLAC), M.-N. Minard (LAPP), J. Mnich (DESY), A. Pullia (INFN - Milan), V. Ruhlmann-Kleider (DAPNIA/CEA), M. Spiro (CNRS), A. Stocchi (LAL), G. Wormser (LAL) et F. Zomer (Université Paris Sud).

electrodynamical processes, leptonic and hadronic structure functions of the photon, and the search for new particles.

Recognized for his integrity, Jacques Haïssinski has participated in many international committees around the world, and held major positions. He was notably Vice-President of the Centre d'Orsay University (1974-1977), spokesman of the CELLO experiment at DESY (1986-1987), Deputy Scientific Director of IN2P3 (1987-1992), he led Dapnia (1992-1996) and chaired the LEPC CERN (1990-1993).

Returned to teaching and research in 1996, he turned to the field of observational cosmology, with the EROS experiment — search of brown dwarfs through gravitational micro-lensing, and the Planck space project — precise measurement of the 3K cosmic microwave background (CMB). In the latter experiment, Jacques Haïssinski played an important role in measuring the temporal response of the HFI bolometers and contributed to the first results of the mission until the publication in Spring 2013 of the highly accurate CMB map obtained by Planck.

Along the same lines as André Lagarrigue, Jacques Haïssinski, outstanding teacher, also advocates the dissemination of knowledge to the general public, especially in the context of Sciences ACO, of which he was president.

Jacques Haïssinski was awarded the Felix Robin prize by the SFP in 2001.

In order to acknowledge his exemplary career, at the same outstanding level as that of his famous elder, the jury had the greatest pleasure to award the 2012 André Lagarrigue prize to Jacques Haïssinski.