

Professor dr. Walter Van Doninck Research director FWO Vlaanderen Professor of experimental physics VUB Vrije Universiteit Brussel Pleinlaan 2 B-1050 Brussels Belgium

Born 31/10/1948 in Bergisch Gladbach (GERMANY) Nationality: Belgian Fluent in Dutch, French, German and English

On leave of absence since January 2000 to the CERN laboratory (Geneva-Switzerland) Tel: office: +41 22 76 71539 GSM: +41 76 487 2781 E-mail : <u>Walter.Vandoninck@cern.ch</u>

University studies in Antwerp (RUCA) and Brussels (VUB) ended July 1971.

PhD in Sciences VUB October 1977 with greatest distinction.

PhD thesis on the experimental discovery of "weak neutral currents" in 1973 in the "Gargamelle" experiment at the CERN PS neutrino beam ; as up to not long ago, considered as the greatest discovery at CERN, with a Nobel price for the theoretical proposers of this model : S.Glashow, A.Salam and S.Weinberg in 1979.

Publication with more than 1000 citations.

Neutrino physics in the Gargamelle and the Big European Bubble chamber (BEBC). Scientific spokesperson for the calorimeter project inside BEBC.

Project leader of the forward-backward muon system of the DELPHI experiment at the LEP e+-ecollider at CERN, coordinating 4 Belgian universities (UA,VUB,ULB and UMH); directing R&D, conception, construction and operation of this system.

Precision measurements in the framework of the "Standard Model of Particles and Force fields" at the LEP collider, personally concentrating on final states containing leptons.

Initiator of the LHC project in Belgium in 1992.

Coordinator for the development of the CMS forward "Micro Strip Gas Chamber" component of the CMS Tracking detector at the "Large Hadron Collider" of CERN, involving the universities UA,VUB,ULB,UCL,UMH and including the laboratories of Aachen, Karlsruhe, Strasbourg, Lyon, and Novosibirsk. Since January 2000 on leave of absence from Belgium: Coordinator for the forward-backward RPC system of the CMS experiment at the LHC involving laboratories from China, Corea and Pakistan; recently the universities of Ghent, VUB and UCL have joined this muon project still under my coordination for which an upgrade programme is foreseen for the LHC design luminosity. I also acted in the technical coordination team of CMS as the integration and assembly responsible for the CMS inner end caps (YE1). And of course recently the experimental discovery of a Brout-Englert-Higgs like boson at a mass of about 126 Gev/c<sup>2</sup> in the ATLAS and CMS experiments leading to the first Nobel Prize in Physics for Belgium for François Englert.

Membership in national and international committees during the past or at present:

- Member of the FWO commission E5 "subatomaire fysica"
- Member of the board of directors of the Belgian Physical Society
- Member of the board of directors of the European Physical Society (HEPP)
- Member of the ECFA and Restricted ECFA committees
- Chair of the MSGC steering committee
- Member of the CMS Management, Collaboration, and Finance Boards

- Chief editor of the CMS bulletin
- Scientific referee for MIUR (Italy) and IEEE projects and conferences
- Belgian scientific delegate to the CERN Council
- Vice-president of the CERN Council
- Member of the Search Committee for the next DG of CERN

## **Publications:**

- Author or co-author of more than 500 scientific publications in refereed international journals (Physics letters, Nuclear Physics, Zeitschrift fur Physik, Nuclear Instruments and Methods etc...) Hirsch index of 81
- Contribution to the book: Revue des questions scientifiques Tome 174 2003 nos 1-2 IISN 035-2160

## **Honours:**

- Laureate of the 2009 EPS HEPP Prize awarded to the "Gargamelle" collaboration for the observation of weak neutral currents
- Laureate of the 2013 EPS HEPP Prize awarded to the "CMS" and "ATLAS" collaborations for the discovery of a new scalar Boson.

## **Education:**

- More than 60 invited talks at international conferences, schools and seminars
- Promotor or co-promotor of more than 12 PhD theses in Belgium (VUB, ULB, UMH, UCL and UA) and member of several international PhD juries
- Chair of several courses in the curriculum of the VUB and the Vesalius college

## **Mobility:**

- Major stays of several months in the USA (Stanford, Berkeley and Fermi lab)
- Major stay of several weeks at KEK Japan
- Since January 2000 detached at CERN as scientific associate