Curriculum Vitae

Name: Petros Afentoulis **RAPIDIS** (Mr.)

<u>Date of Birth:</u> January 1, 1951

<u>Place of Birth:</u> Heraklion, Crete, Greece

Nationality: Dual, US Citizen (naturalized) and Greek (by birth)

Home Address: 5750 Bou Ave, Unit 1416

Rockville, MD 20852-5630

U.S.A.

Telephone (mobile): +1 301 525 4233

<u>Electronic mail:</u> <u>petros.rapidis@gmail.com</u>

Education: Athens College High School, Athens, Greece - Graduated in June 1969

Massachusetts Institute of Technology, Cambridge, Massachusetts

B.Sc., Physics, June 1, 1973

Stanford University, Stanford, California

M.S., Physics, April 3, 1975; Ph.D., Physics, June 17, 1979

Thesis: D Meson Production in e⁺e⁻ Annihilation; Advisor: Prof. M. L. Perl

Employment: October 1974 - May 1979 Stanford Linear Accelerator Center, California

October 1974 - May 1979 Research Assistant

May 1979 - June 2008 Fermi National Accelerator Laboratory, Batavia, Illinois

May 1979 - July 1982 Research Associate
July 1982 - August 1985 R.R. Wilson Fellow
August 1985 - October 1989 Associate Scientist

October 1989 - March 1997 Scientist I March 1997 - June 2008 Scientist II (leave of absence from February 2006)

May 1997 - May 1999 Deputy Leader, Silicon Detector Center June 2000 - June 2002 Co-Leader, DØ Silicon Microvertex

Tracker Group

February 2005 - January 2006 Deputy Leader, Liquid Argon TPC

Development Group

<u>February 2006 – December 2015</u> Institute of Nuclear Physics, National

Center for Scientific Research 'Demokritos', Athens, Greece

February 2006 - February 2011 Institute Director

February 2006 – December 2015 Director of Research (Researcher A)

May 2011 - February 2013 Member of the CERN Council (Greek

Scientific Delegate, CERN Council)

<u>January 2016 – June 2016</u> Office of High Energy Physics, Office of Science,

U.S. Dept. of Energy, Germantown, Maryland

Program Manager, Intensity Frontier

Research Career:

1974-1979: e^+e^- annihilation at SPEAR, Stanford Linear Accelerator Center, Experiment SP-17 (MARK-I magnetic detector), and Experiment SP-26 (Lead Glass Wall addition to MARK-I)

 $1979\hbox{-}1984\hbox{:}\ Deep\ in elastic\ neutrino\ scattering,}$

 $Experiment\,E616\,(CCFRR\,collaboration),$

Experiment E701 (CCFRR neutrino oscillations),

Experiment E744 (Neutrino scattering at the Tevatron), and

Experiment E595 (Prompt muon production and charm production)

1984-1993: Construction of TeV-I (Antiproton Source)

Construct & Commission the Antiproton Source (Ring and beamline diagnostics)

Experiment E760 (Resonant charmonium production in $p\bar{p}$ annihilation)

1993-2004: DØ Experiment (E740/E823) ($p\bar{p}$ collisions at 1.96 TeV), Design, construction, and operation of the SMT (Silicon Microvertex Tracker)

2004 - 2006: Liquid Argon detector R&D, (Work towards a multi kton Liquid Argon imaging detector for an off-axis location in the Fermilab Neutrino Beam)

2006 - 2015: KM3NeT

Work towards the design of a large volume (a few cubic kilometers) underwater neutrino detector in the Mediterranean Sea

2016 Office of High Energy Physics. U.S. Dept. of Energy Manager for the Intensity Frontier for High Energy Physics

<u>Professional Societies</u>: American Physical Society, Sigma Xi, European Physical Society, American Association for the Advancement of Science,

Distinctions

For the period of 1982-1985 I was appointed as the third R.R. Wilson Research Fellow at Fermilab. This is the *highest* distinction that the Laboratory can bestow to a young scientist.

In May 2011 I was appointed as the scientific Greek Delegate to the CERN Council.

Other Professional Activities

Scientist in charge of diagnostics in the Antiproton Source rings and beam lines, 1984-1989.

Physicist responsible for the design, construction, and commissioning of the lead-glass cylindrical electromagnetic calorimeter for E760.

Referee to the Fermilab Program Advisory Committee on 'Future Low Energy Antiproton Experiments at the Fermilab Antiproton Source', Summer Meeting of the PAC 1989.

I was the Fermilab representative at the PSSC (Proton Synchrotron Scientific Committee) of CERN at its long range planning meeting of September 12-16, 1990 at Cogne, Italy

I was a leader in the effort to build the Silicon Trackers for the colliding beam detectors at Fermilab (CDF and DØ), and in particular I was the co-leader of the DØ Silicon Microvertex Tracker Group (1997-2002).

I was the Fermilab representative to the DØ Experiment's Institutional Board for 2001-2003.

I have been a referee for many years for Physical Review D and Physical Review Letters and I have reviewed numerous submissions (>25) to these journals.

I was selected and served as Director of the Institute of Nuclear Physics of the National Center for Scientific Research 'Demokritos' (2006-2011), which is Greece's major group for research in nuclear and particle physics.

I have been a member of the Physical Sciences and Engineering Working Group of the European Strategy Forum for Research Infrastructures (ESFRI) for 2007-2008, where I served as the Chair of the Astrophysics, Nuclear, and Particle Physics Review Subpanel which reviewed proposals in these fields for inclusion in ESFRI Roadmap.

I have been a member of the KM3NeT Consortium's governing body (Program Coordinating Committee) and of its Conceptual Design Report Editorial Board.

Chief editor of the Proceedings of the 2009 International Workshop on a Very Large Volume Neutrino Telescope for the Mediterranean Sea (VLVnT09), Athens, Oct. 2009, (*Nucl. Instrum. Methods.* **626–627** *Supplement*, (2011)

I presented the vision of our group (NESTOR) for the KM3NeT during its review by the Scientific Standing Committee (SSC), an external review panel of leading scientists, in November 2011 at Amsterdam. Our view is explained in the note titled 'An Alternative Strategy for KM3NeT'. The 'Alternative Strategy' note, the report of the SSC, and supporting material can be found on the KM3NeT web pages and have also been placed at the URL http://www.inp.demokritos.gr/~km3net/SSCreport

I was selected in May 2011 as the Greek Scientific Delegate to the CERN Council, a position that I held until February 2013.

I was a member of European Strategy Group for Particle Physics for the 2013 upgrade of the strategy, and I participated and contributed significantly during the Strategy Drafting Session held in Erice, Sicily, Italy in January 2013, where I argued towards a Future Circular Collider as the major option for CERN's future.

For January 2012 to December 2015 I was the spokesperson for the NESTOR project.

For the period of March 2014 to December 2015 I was a member of the Physical Sciences Advisory Board of the Greek National Council for Research and Technology.

In January 2016 I was competitively selected for the position of Program Manager for the Intensity Frontier in the Office of High Energy Physics of the U.S. Department of Energy.

Note:

I attach only a list of selected publications, a copy of these selected publications is in:

http://www.inp.demokritos.gr/~rapidis/CVlong/Rapidis_sel_pubs/

Furthermore, a list of <u>all</u> my publications is at:

http://www.inp.demokritos.gr/~rapidis/CVlong/Rapidis_all_pubs/a000_Rapidis_all_pubs.pdf

and that copies of <u>all</u> my publications can be found in:

http://www.inp.demokritos.gr/~rapidis/CVlong/Rapidis_all_pubs/

A long and detailed version of my CV is found at:

http://www.inp.demokritos.gr/~rapidis/CVlong/CVf.pdf