

Curriculum Vitae

Eugenio Nappi

Date of birth:

September 21, 1957 – Mugnano del
Cardinale (AV), Italy

Citizenship: Italian**Social status:** married, two children**Email address:** eugenio.nappi@ba.infn.it**Professional address :**

INFN Sezione di Bari
Via G. Amendola, 173
I-70124 Bari
Italy

Present position:

Director of INFN Unit of Bari, Italy.

**Professional experience:**

Dr. E. Nappi studied physics at the University of Bari. He completed his higher education in 1981 with a thesis in experimental particle physics on the measurement of direct photon production in hadron-hadron collisions at the CERN-SPS NA24 experiment. In 1983, he became a staff researcher at the INFN and, since 2002, he is Director of Research.

In 2006, he was appointed director of the INFN Unit of Bari for a three year term, recently extended until 2012.

His research activity, primarily concerned with the experimental study of the heavy nucleus reactions at ultrarelativistic energies and the spin structure of the nucleons, has been carried out at CERN and DESY (Germany). Collaboration with USA groups at BNL (Brookhaven) and at TJNAF Laboratory (Virginia) has fruitfully been established in the last years. Since the beginning of his career, he has had a keen interest in the experimental aspects of CERN's physics programme of ultra-relativistic collisions of heavy ions. In this field, devoted to the study of the hot and dense medium formed by the coalescence of hundreds of protons and neutrons, he has been active in the NA35, WA97 and NA57 experiments at the SPS and subsequently in the conception and development of the ALICE experiment at the LHC.

During the seventeen years spent in ALICE, he has occupied the highest managerial positions; he is member of the Management Board of ALICE since 1998, year in which he was the recipient of a two-year scientific associateship at CERN to serve the experiment as deputy-spokesperson. In this role, he played leading responsibilities and the coordination of the international teams involved in the editing of the Technical Design Reports of the ALICE sub-systems.

At the end of his mandate, in 2000, he became the project leader of the Cherenkov system, named HMPID (High Momentum Particle Identification Detector), devoted to the identification

of charged hadrons with a transverse momentum above 1 GeV/c. He was instrumental in guiding the construction of the detector and to secure the corresponding funds by persuading the Italian scientific agency. He also coordinated the successful joint venture between CERN and RHIC aiming to exploit a large area prototype of the HMPID detector in the STAR experiments.

HMPID successfully came into operation in September 2006 and is the largest CsI Ring Imaging Cherenkov detector (RICH) so far built in the world. The CsI photocathode development carried out under his responsibility paved the way for the approval and construction of other large CsI RICH devices, such as those employed in the COMPASS and TJNAF-Hall A experiments.

In 2000, he joined the HERMES experiment at HERA-DESY, designed to study, through deep inelastic scatterings, the spin structure of the proton (or neutron). In HERMES, he drove the design of the first aerogel radiator RICH detector ever built in the world and, for related activities, he was the recipient of a grant (RII-CT-2004-506078-JRA9) from EC-FP6 call.

In parallel to the above activities, few years ago, he conveyed his interest towards the medical imaging, which led him to join the AX-PET collaboration at CERN. The AX-PET aim is to carry on an R&D program focused on a novel geometrical concept of a Positron Emission Tomography (PET) featuring a parallax-free 3D reconstruction of the positron source distribution with high spatial and energy resolution over the complete Field of View.

As Director at the INFN Unit of Bari since August 2006, he has gained additional managerial experience and established many international contacts. The Bari Unit of INFN is an Institution which supports research in nuclear, particle and astroparticle physics, with about 70 staff (researchers, administrators, engineers, technicians) and about 130 associates (mainly university professors).

Conscious of the importance of education and communication, he has been particularly attentive to the training of young people. His achievements also include the development of postgraduate education in detector physics and innovative technologies and a number of successful industrial collaborations with hi-tech commercial partners.

He is authors and co-authors of more than 180 papers published in international journals with peer-reviewing (**average citations per year: 213.75; sum of times cited= 4275; h-index: 33 as from ISI-WEB of Knowledge**).

He is referee of scientific journals and member of International Scientific Advisory Committees and Organizing Committees to several Conferences and Workshops on Nuclear Physics instrumentation.

Teaching experience

- Since 1998, undergraduate and graduate courses at the Universities of Bari and Rome Tor Vergata;
- Lecturer at VIII International ICFA School, Istanbul (July, 1999);
- Lecturer at the International School on Nuclear Physics, Joliot-Curie, Maubuisson (Francia) (September 2001);
- Lecturer at the First ICFA instrumentation school at ICFA Instrumentation Center in Morelia, 18-29 November 2002, Morelia (Mexico);

- Lecturer at the International School of physics “Enrico Fermi” Course CLXVII, “Strangeness and Spin in Fundamental Physics”, June 19-29 2007, Varenna (Italy).

Thesis Advisor of twelve master and six PHD thesis and postgraduate-scholar sponsor of four grants.

Member of the Doctoral Committee of PhD thesis in Italy and France (University Paris XI, Orsay in 2000 and University Claude Bernard, Lyon in 2001)

Journal reviewer

- "Nuclear Instrument and Methods in Physics Research, Section A" by North- Holland, since 1996.
- IEEE - Transaction in Nuclear Science (TNS), since 2000.
- New Journal of Physics (by IOP Publishing Limited), since 2005.
- JINST, since 2009.

Advisor

- "Fund for Scientific Research" Flanders (Belgium) in 1999.

Editorial activities

- "Experimental Techniques of Cherenkov Light Imaging", (ISSN 0168-9002), published by North-Holland in 1994.
- QCD@WORK Proceedings 2005 and 2007 (ISBN 0-7354-0302-3 and 978-0-7354-0480-9, respectively) published by AIP (American Institute of Physics).
- Technical Design Report CERN/LHCC 98-19 "Detector for High Momentum PID", ISBN 92-9083-134-0.
- Innovative detectors for supercolliders, ISBN 981-238-745-5, published by World Scientific in 2004.
- Topical Editor of Nuovo Cimento B.

Membership in International Scientific Committees

- Representative of INFN in NuPECC.
- Representative of INFN in Plenary ECFA.
- Management Board of the ALICE Experiment.
- Collaboration Board of the ALICE experiment.
- Chair of the Institute Board of the AXPET project.

Membership in International Scientific Advisory Committees of Workshops and Conferences

- Six editions of the International Workshop on RICH detectors (1993, 1995, 1998, 2002, 2005, 2007).
- Four editions of the International Conference on New Development in Photo-detection, Beaune, France (1996, 1999, 2002, 2005).
- VI, VII, VIII, IX and X International Conference on "Advanced Technology and Particle Physics", Villa Olmo, Italy, (1998, 2001, 2004, 2007, 2009).
- I topical symposium on Functional Breast Imaging with Advanced Detectors, Roma, Italy 2001.

- Chairman of the VI and VII International Workshops on RICH detectors, Trieste, Italy 2007 and Cassis, France 2010, respectively.
- V International Conference on New Development in Photodetection, Aix-les-Bain, France 2008.

Scientific Event Organizer

- I International Workshop on RICH detectors, Bari, Italy 1993.
- International conferences on QCD (QCD@WORK), four editions so far (2001, 2003, 2005, 2007).
- Workshop on Innovative detectors for supercolliders, Erice, Italy, 28 Sept-4 Oct. 2003.
- IWASI 2007, 2nd IEEE International Workshop on advances in sensors and interfaces, 26-27 June 2007, Bari, Italy.
- IWASI 2009, 3rd IEEE International Workshop on advances in sensors and interfaces, 25-26 June 2009, Trani, Italy.
- Fermi School, “From the Big Bang to the nucleosynthesis”, Varenna, July 2010.

International Research Grants

- INTAS, CERN Call 2000 #350 “Design and construction of the support structure and of a system for storing CsI photocathodes for the High Momentum Particle Identification (HMPID) detector at ALICE
- INTAS, CERN Call 2005 # 103, Project 7544. “Development of a Cherenkov detector to extend the PID capability of ALICE beyond 5 GeV/c”
- EC FP6 Call n. RII-CT-2004-506078 (“HadronPhysics”) – JRA9