Curriculum Vitae of Francesco Terranova

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I have been working in experimental neutrino physics for about 25 years giving significant contributions to the construction, running and data analysis of OPERA (observation of tau neutrino appearance in a long-baseline experiment), CUORE (search for neutrinoless double-beta decay with bolometers), and proposing the concept of "monitored neutrino beam" (NP06/ENUBET). My contributions to the field also include studies on novel neutrino sources (beta beams, neutrino factory, and tagged neutrino beams) and R&D on single-phase liquid argon TPC. I am a member of the DUNE Collaboration and technical lead of the Photon Detection System.

Main areas of research

Electroweak physics at e⁺e⁻ colliders: **DELPHI** at LEP [1994-2001] Hadro-production experiments: **NA56/SPY** at SPS [1995-1997] Neutrino Oscillation Experiments: **OPERA** [2001-2011], **DUNE** [2018-present] Neutrino-less double beta decay: **CUORE** [2012-present] R&D's: Liquid Argon TPC [1997-1999]) Beta Beams, Neutrino Factories (**BENE** [2004-2008], **EUROnu** [2008-2012]), Monitored Neutrino Beams (**SCENTT** and **NP06/ENUBET** [2016-present])

Coordination of Research Projects (selection)

2000-2001 Physics Convener of the Trilinear Gauge Coupling working group at DELPHI 2005-2008 Project Leader of the magnets for the OPERA experiments 2006-2011 INFN Group Leader at LNF (Frascati) for OPERA 2006-2007 Run Coordinator of OPERA during the start-up of the CNGS 2007-2008 Technical Coordinator of the electronic detectors for the OPERA experiment 2007-2011 Member of the Executive Board of the OPERA Experiment 2009-2011 Deputy Spokesperson of the OPERA experiment 2011-2014 Member of the Technical Board of the CUORE experiment and coordinator of the cryostat construction during the Phase I 2014-2018 Member of the Executive Board of the CUORE experiment 2016-present Principal Investigator of the INFN SCENTT and ENUBET_2 Project 2019-present National Representative in the DUNE PDS Management Board 2019-present Spokesperson of the CERN NP06/ENUBET experiment 2021-present Technical lead of the DUNE Photon Detection System 2023-present Coordinator of the Monitored Neutrino Beam working group at ESSnuSBplus

Boards and Commissions of trust (selection)

2006-present reviewer for the ERC (EU); CERN, SNSF (Switzerland); INFN, MUR (Italy); ANR, IN2P3/CNRS (France), DOE (US), NSC (Poland)

2003-present reviewer for 24 international journals (e.g. Phys. Rev. Lett, Eur. Phys. J. C, Phys. Rev. D, JHEP, JINST, Phys. Rev. A, Phys. Lett. B, etc.)

2008-2011 Member of the INFN **Funding Committee** for Astroparticle Physics (Commissione Scientifica Nazionale II).

2009-2011 Ex-officio member of the Collaboration Board of OPERA.

2010-2012 Member of the MICE Trans-National Access (TNA) board

2014-2018 Ex-officio member of the Institutional Board of CUORE.

2013-2016 Member of the Ionisation Cooling Test Facility Applications Panel for EuCARD-2

2016-2019 Member of the Management Committee of the COST Action EuroNuNet

2016-2019 Member of the CERN Proto-Synchrotron (PS) and Super-Proton-Synchrotron (SPS) Scientific Committee (SPSC)

2018-2022 National coordinator and member of the **Governing Board** of ESSnuSB (call: H2020-INFRADEV-2017-1)

2019-present Member of the DUNE Institutional Board

2020-present Member of the Editorial Board of Universe

2023-present Member of the Executive Board of ESSnuSBplus (call: HORIZON-INFRA-2022-DEV-01)

Summary of scientific publications

Author of 448 papers in the InSPIRE database (280 published in peer-reviewed journals) Total number of citations (citeable papers): 20780 Average citations per paper: 46.4 H-index: InSPIRE 70

Grants and research funds

I received grants and research funds from INFN, EU, Univ. of Milano Bicocca, MIUR, and CERN for a total amount of about 5.4 M€