

Prof. Luca Tomassetti – Short Curriculum Vitae

Graduate in Physics at the University of Ferrara (1997);
PhD in Physics at the University of Ferrara (2002);
postdoc positions at University of Ferrara (2002 – 2008);
Assistant Professor in Computer Science at the University of Ferrara (2008 – 2018);
Associate professor of Experimental Physics (2018 – present).

Member of the National Scientific Committee 5 (Technological research) of INFN, the National Institute of Nuclear Physics, in the Detectors and Electronics, and in the Multidisciplinary Physics committees, 2011 – 2019.

Member of the INFN's evaluation WG (GLV), in the research, and in the technology transfer committees, 2012 – present.

Member of the INFN's TTLab (Technology Transfer Laboratory), in the ICT field, 2014 – present.

Scientific responsibilities for National and International research projects:

- scientific coordinator of the Italian collaboration (INFN groups of 4 Institutions) of the FRANCIUM and WADE experiments, trapping of francium atoms for fundamental physics studies, 2012-2015.
- unit coordinator of the AXIOMA experiment, development of new spectroscopic techniques for cosmologic axions detection (2016 – 2018).
- unit coordinator of the NU_AT_FNAL experiment, neutrino physics program at FNAL and member of the Institutional Board of the DUNE experiment (since 2020).
- member of the EU funded TORUS (Toward an Open Resources Upon Services) project on Cloud Computing of Environmental Data, 2015 – 2019; European Joint Doctorate STIMULATE, 2017 – present, and MONTUS (Master On New Technologies Using Services) project, 2018 – present.
- member of the LHCb Collaboration (since 2013) with involvements in RICH operation and upgrade, and in offline distributed computing;
- member of the AXIOMA/DEMIURGOS Collaboration (since 2016).
- previously member of the FRANCIUM/WADE, SuperB, and E835 Collaborations.

Supervisor of 2 Postdocs, 6 PhD students, >20 Master students, >80 Bachelor students.

Currently, lecturer for the “Object-Oriented Programming for experimental data analysis” course, Dual Master's Degree in Physics, University of Ferrara - Paris-Sud, and “Physics” course, Bachelor's Degree in Biology, University of Ferrara.

Research interests:

- Particle physics (1996 – present): charmonium spectroscopy, study of the B meson decays, test of the Standard Model of particle physics.
- Accelerator, detector and laser physics (1999 – present): "white-light" laser cooling, magneto- optical traps, production and trapping of francium atoms. Development of innovative detectors and related electronics.
- Computing for experimental physics and interdisciplinary applications (2008 – present): distributed computing for high-energy physics experiments, cloud computing, data acquisition systems.

Bibliometric indicators (ISI-Web of Science, August 2021):

- number of articles published on International journals: 489
- number of citations received by these articles: 12540
- H-index: 50