

Curriculum Vitae of Luca Stanco

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Email: luca.stanco@pd.infn.it
Citizenship: Italian
Born: Monselice (Italy) on April 22th, 1957

Career

2002 - present Dirigente di Ricerca at INFN
1993 - 2002 Primo Ricercatore at INFN
1991 - 1992 Visiting Scientist at FNAL, Batavia (USA)
1988 - 1991 Staff Researcher at INFN
1987 Researcher at INFN (art. 23)
1984 - 1986 PhD (Italian I° ciclo) in Physics (Padova University)
1982 - 1983 Fellowship at LAL, Orsay (France)
1981 Fellowship at KFA, Jülich (Germany)
1980 Graduation in Physics (Padova University)

Research Activity Summary

- 1981 Theoretical studies on the problem of orbit stability in accelerators.
- 1982 - 1983 The DM2 experiment at L.A.L. (Orsay, France). In charge of data calibration for the central drift chamber and luminosity measurement.
- 1984 Studies of the production processes K^+K^- and $\pi^+\pi^-$ and the kaon and pion Form factors in the $1.4 \div 2.0$ GeV region.
- 1985 - 1986 Studies of J/ψ radiative decays in couple of vector mesons ($J/\psi \rightarrow \gamma\phi\phi, \gamma\omega\omega, \gamma\rho\rho$) discovering a surplus of pseudoscalar production in the $1.5 \div 2.1$ GeV region, entangled in the standard *quark-quark* scenario.
- 1987 - 1991 Several analysis in Partial Waves for J/ψ decays searching for *glueballs*.
- 1985 - 1991 The ZEUS experiment at DESY (Hamburg, Germany). Muon reconstruction tools. First use of Kalman Technique in particle physics. Coordination of the work on the global event reconstruction. Convener of the HERA studying group on Heavy Flavor as ZEUS representative.
- 1988 - 2000 HERWIG Monte Carlo. As one of the authors development of some relevant $e - p$ reactions and their updates over the years.
- 1991 - 1997 The CDF experiment at FNAL (Batavia, Usa). Mainly involved in the top-quark analysis of CDF pioneering the top search in the full hadronic mode.
- 1994 - 1997 Partially involved in the CMS experiment in coordinating initial studies on the muon reconstruction.
- 1993 - 2009 Involvement in the ZEUS experiment. Physics coordination in Padova. Padova Group Leader from 1997 up to the end of the experiment. ZEUS conveners of the Exotics group (1998-1999). Internal ZEUS editor.
- 2000 - present Neutrino Physics with the OPERA experiment at LNGS (Assergi, Italy). Padova Group Leader with responsibility in the design and the realization of the Inner Electronic Detectors of the Spectrometers. Project Leader of the Resistive Plate Chamber system. Involved in the organization and the management of the OPERA Collaboration. OPERA coordinator at the time of the first arrival of the CNGS neutrino beam in August 2006. Responsible of the Statistical Analysis of the first tau candidate. Resource Coordinator and Member of the Publication&Talk Board (2009-2012).
- 2007 - present The GERDA experiment. Setting up of the Padova group.
- 2011 - 2015 Principal Investigator of the NESSiE proposal at CERN/FNAL new ShortBaseLine Neutrino Facility. NESSiE was in synergy with the ICARUS Collaboration, led by Prof. C. Rubbia. The proposal was submitted and extensively discussed by the CERN and FNAL committees and managements. It has been in stand-by by lack of funding.
- 2014 - present JUNO experiment at Jiangmeng (China). Support for the Electronics commitment to the Padova group.
- 2014 - present COSMO_WNEXT experiment. Participation to the ESA mission, EUCLID, for the study of the Dark Energy. Collaboration for the data analysis of the PLANCK data.

Teaching, Honours and Specific Roles

- 1993 - 2005* Teaching duties on General Physics (1993-2001),
Subnuclear Physics (1997-2001),
Specialized courses of the PhD programs in 2001 and 2005.
- 1994 - 2000* INFN Researcher representative in Padova.
- June 2002* Rewarded by ISI-Thomson as ranked among the top 15 “highly cited researchers”, namely physics researchers whose publications were most often cited in academic journals over the 1991-2001 decade. At that time I was author and co-author of about 350 papers cited about 15,000 times.
- 2005 - present* Act as Editor of Advances in High Energy Physics.
- 2009 - present* Adjunct Professor in General Physics at the Faculty of Medicine and in Statistics and Data Analysis for undergraduate students of Physics.
- 2013 - present* Specialized lessons on Statistics and Data Analysis for PhD in Physics and Master in Engineering.
- 2011 - 2015* Spokesperson of the NESSiE Collaboration.
- 2014 - present* Italian P.I. of the COSMO_WNEXT Collaboration.

Conferences, Students

Dozens of talks given in national and international institutes, workshops schools and conferences. At present I give invited talks at 2-3 international Conferences/Workshops per year and a similar number of seminars at different Universities. Over the years I supervised about 30 undergraduate and PhD students. Most recent and relevant Presentations:

- January 2012* “The OPERA experiment: Direct Tau neutrino appearance and Neutrino Time of Flight Measurement”, IAS-CERN School, Singapore
- 14-16 May 2012* “Search for Short BaseLine neutrino “anomalies with innovative LAr imaging detectors coupled with large muon spectrometers”, European Strategy for Neutrino Oscillation Physics - II, CERN (Switzerland)
- September 2012* “Search for STERILE neutrinos with the Short-Baseline project at CERN”, XCVIII SIF Congress, Napoli (Italy)
- 9-16 September 2012* “Short-baseline oscillations of high-energy neutrinos”, NOW2012, Conca Specchiulla (Italy)
- 17-21 December 2012* “The Sterile Neutrino Issue”, Miami2012, Miami (Usa)
- 11-15 March 2013* “The NESSiE concept for Sterile Neutrinos”, XV Neutrino Telescope Conference, Venice (Italy)
- 26-27 March 2013* “The NESSiE concept for Sterile Neutrinos”, nuSTORM Workshop, CERN (Switzerland)
- 2-9 July 2014* “The NESSiE way for Sterile Neutrinos”, ICHEP2014, Valencia (Spain)
- 22-29 July 2015* “Search for Sterile Neutrinos at Long-Baseline”, EPS2015, Vienna (Austria)

Bibliometric indexes

About 480 peer reviewed papers with more than 30,000 citation, h-index = 96.

Padova, 1 settembre 2015