

Silvia Leoni

CURRICULUM VITAE

[last update 6 Aprile 2019]

E-mail	Silvia.Leoni@mi.infn.it
Work Address	Dipartimento di Fisica, Via Celoria 16, 20133 Milano
Education	<ul style="list-style-type: none"> • Laurea (Master) in Physics (1989) – University of Milano, Supervisor: A. Bracco • Ph.D. in Physics (1992) – University of Milano, Supervisor: A. Bracco (Thesis: "Study of the Quasi-Continuum Rotational Motion at High Angular Momentum")
Current Position	Full Professor at Department of Physics – University of Milano (since 1/10/2017)
Previous Positions	<ul style="list-style-type: none"> • Post-Doc position "Angelo della Riccia" 01-03/1993, Niels Bohr Institute (Risø, Denmark) • Post-Doc position from INFN 04/1993-04/1994, Niels Bohr Institute (Risø, Denmark) • Post-Doc position from CSNSM Orsay 05-09/1994, CSNSM (Orsay, France) • Post-Doc Position "Human Capital and Mobility" European Program, 10/1994-05/1996, refers Prof. B. Herskind and Prof. T. Dossing, Niels Bohr Institute (Risø, Denmark) • Temporary INFN contract "Articolo 36" 06/1996-06/1998, INFN-Milano • Assistant Professor 07/1998-03/2006 – University of Milano • Associate Professor – University of Milano, until 30/09/2017
Teaching Activities	<ul style="list-style-type: none"> • 1998-2003: General Physics II (Electromagnetism): Exercises/Exams (B. Sc. Students in Physics) • 2000-2005: Specialisation School for Secondary School Teachers (SILSIS) –Lectures • 2001-2002: General Physics III (Optics and Waves): Exercises/Exams (B. Sc. Students in Physics) • 2005-2010: Nuclei under Extreme Conditions – Lectures (M. Sc. Students in Physics) • 2003-present: General Physics – Lectures and Exercises (B. Sc. Students in Biology) • 2006-present: Radiation Interaction and detection techniques – Lectures (B. and M. Sc. Students in Physics) • 2011-present: Nuclear Structure and Nuclear Reaction – Lectures (Ph.D. Students in Physics) – Inter University course between Milano and Padova University. <p>Supervisor of 4 theses of the Specialisation School for Secondary School Teachers (SILSIS) Supervisor of Bachelor theses in Physics: 16 Supervisor of Master theses in Physics: 27 Supervisor of 6 Ph.D. theses in Physics (D. Montanari, V. Vandone, S. Bottoni, G. Bocchi, C. Porzio, S. Ziliani)</p> <p>Member of committees for Ph.D. evaluation: 4 in Italy, 2 abroad (Univ. Paris Sud, Oslo) 2005-present: Member of the board of Graduate School in Physics – Milano University Referent Professor for Bilateral Agreements with PHD Schools of Krakow and Bucharest 2017-: responsible for a post-doc position (Assegno A, S. Bottoni) of Milano University</p>
Research Topics	<p>Experimental Nuclear Physics, in particular gamma and particle spectroscopy, focusing on nuclear structure of stable and exotic nuclei: collective modes of excitations (rotation and vibration), couplings phenomena, coexistence of shapes, structure of light systems.</p> <p>The experiments are carried out with multidetectors arrays of germanium, scintillator, charged particle detectors, and spectrometers, at the forefront of technologies, at National and International Laboratories. Reactions with stable and radioactive beams are employed, up to relativistic energies, and intense neutron beams. Central topic, in coming years, will be the physics of <i>exotic nuclei</i> (I am spokesperson of Letters of Intent for future experiments with new generation, high-intensity, radioactive beams and <i>state-of-the-art</i> detection systems, at ISOLDE-CERN, SPES-LNL, SPIRAL-GANIL).</p>

Experience in Managing Research Funds	<ul style="list-style-type: none"> • 2005-2013: Local Responsible (Milano INFN section) of GAMMA experiment - INFN Scientific Committee III (Nuclear Physics) • 2014-present: National Responsible of GAMMA experiment - INFN Scientific Committee III
Participation in Scientific Collaboration Committees	<ul style="list-style-type: none"> • 1999-2003: Member of Data Analysis Group of the European TMR-EUROBALL project • 2004-present: Member of Steering Committee of EXOGAM Ge Array – GANIL (France) • 2012-present: Member of the PARIS Management Board (Coordinator of DATA Analysis Working Group - analysis of complex data with modular scintillator array) • 2016-present: Member of the NUSPIN Scientific Committee (ENSAR2 European Nuclear Spectroscopy Instrumentation Network) • 2014-present: Core-Team Member of the EXILL collaboration (Gamma Spectroscopy with neutron induced reactions) at Institut Laue-Langevin (ILL) – Grenoble (France) • 2018-present: Core-Team Member of the FIPPS collaboration (Gamma Spectroscopy with neutron induced reactions) at Institut Laue-Langevin (ILL) – Grenoble (France)
Participation in Laboratory Scientific Committees	<ul style="list-style-type: none"> • 2016-present: Member of the Program Advisory Committee (PAC) of the Tandem Laboratory the Horia Hulubei National Institute of Physics in Bucharest (Romania) • Since February 2017: Member of the Program Advisory Committee (PAC) of College 3 "Nuclear and particle physics" of the Interdisciplinary Laboratory of Institut Laue-Langevin (ILL) – Grenoble (France)
Evaluation activity in International Review Committees	<ul style="list-style-type: none"> • Chair of the INFN Committee for the designation of the Award "Claudio Villi 2008" for the best Doctoral thesis in Nuclear Physics • Member of committees for selection and promotion of personnel of Italian Universities (1 RTDA in 2014 and 1 RTDB in 2016, Padova University) • Member of the committee for promotion of personnel of Istituto Italiano Fisica Nucleare (Concorso I Ricercatore n. 20016, October 18-February 19) • Evaluator for Italian Ministry for Education and Research (MIUR) projects • Evaluator for Croatian Science Foundation (HRZZ) Projects (2014) • Evaluator for Science and Technology Facilities Council (STFC), UK (2011 and 2014) • Evaluator for Czech Republic Ministry of Education projects (2017) • Member of the Review Committee for the <i>FIPPS phase II Project</i>, ILL, Grenoble (2017)
Review Activity for Scientific Journals	<p>Referee for several international journals:</p> <ul style="list-style-type: none"> • Physical Review Letters • Physical Review C • Nuclear Physica A • European Physical Journal A • Journal of Physics J • Acta Physica Polonica • Journal of Environmental Radiocativity
Consultant Activity	<p>Reviewer of Scientific Text Books for University Courses</p> <ul style="list-style-type: none"> • Editor Zanichelli: Physics (Cutnell, Johnson, 2009) and University Physics (Kesten, 2012))
Activity in Writing Groups for Research Plans	<ul style="list-style-type: none"> • Convener of working group "Collective Modes in the continuum", editing the Report "Future Prospects for high resolution gamma spectroscopy at GANIL", GANIL 2005 • Member of Working Group 3 (Nuclear Structure and Reaction Dynamics) of NUPECC Long Range Plan 2016. Written contributions for subgroups 1 (Nuclear Structure), 3 (Equation of state) and 5 (Facilities and Instrumentation). • Convener of the AGATA white paper – AGATA@LNL physics case (June 2019).
Activity for Conferences and Workshops	<ul style="list-style-type: none"> • Workshop "Future Prospects for high resolution gamma spectroscopy at GANIL", Convener of working group "Collective Modes in the continuum" – GANIL 2005 • Organizer of EXOGAM Workshop – GANIL 2010

	<ul style="list-style-type: none"> • Local Organizer of International Nuclear Physics Conference INPC2013 – Florence 2013 • Local Organizer of EUNPC18 – Bologna 2018 • Local Organizer NUSTAR Week 2018 - Milano, Settembre 2018 • Organizer of the Workshop AGATA@LNL for stable beams – LNL, 25-26 March 2019 • Organizer of “1st Topical Workshop - Modern Aspects in Nuclear Structure” – Bormio 2012 • Organizer of “2nd Topical Workshop - Modern Aspects in Nuclear Structure” – Bormio 2014 • Organizer of “3rd Topical Workshop - Modern Aspects in Nuclear Structure” – Bormio 2016 • Organizer of “4th Topical Workshop - Modern Aspects in Nuclear Structure” – Bormio 2018 • Organizer of “5th Topical Workshop - Modern Aspects in Nuclear Structure” – Bormio 2020
Publications (1990 -present)	<p>Source: ISI Web of Science, 6th April 2019</p> <p>Coauthor of more than 300 research papers</p> <p>Citations in Total: more than 4000</p> <p>Citations (without self-citing): more than 3000</p> <p>Average citation per paper: 14</p> <p>Hirsch-index: 33</p> <p>In particular:</p> <ul style="list-style-type: none"> • Coauthor of more than 180 research papers in peer-reviewed scientific journals, including <ul style="list-style-type: none"> 23 <i>Physical Review Letters</i> (4 as first author, with one <i>Editor's Suggestion</i>) 19 <i>Physics Letters B</i> (with one selected as <i>Highlight</i> of ILL Laboratory) 54 <i>Physical Review C</i> 1 <i>Physics Report</i> (1996) – invited Review 1 <i>Report on Progress in Physics</i> (2002) – invited Review 1 <i>Progress in Particle and Nuclear Physics</i> (2016) – invited Review 1 <i>Physica Scripta</i> (2016) – invited Review • Coauthor of 77 Post-Conference papers published in peer-reviewed journals (several in special volumes of scientific journals) • Coauthor of 59 papers in Conference Proceeding volumes
Presentations at International Conferences	<ul style="list-style-type: none"> • 63 Invited talks at international conferences and workshops, including <ul style="list-style-type: none"> - plenary talk at Nucleus-Nucleus 2015, Catania 2015 - plenary talk at EUNPC15, Groningen 2015 - invited review at the Spanish Scientific Advisory Board- Nuclear and Particle Physics (VIII CPAN DAYS), Zaragoza-Spain, 2016 - keynote speaker at the ILL&ESS European User Meeting, Grenoble 2018 • 45 contributed talks at international conferences and workshops • 11 Lectures at International Schools and Seminars at Universities and Laboratories, including <ul style="list-style-type: none"> - invited review on EXILL campaign at ILL Director Board, Grenoble 2015