CURRICULUM VITAE

Matteo Leone

(email: matteo.leone@unito.it)

ACADEMIC POSITION

Academic field (GSD): 02/PHYS-06 – Fisica per le scienze della vita, l'ambiente e i beni culturali, didattica e storia della fisica (former SC: 02/D1)

Academic discipline (SSD): PHYS-06/B – Didattica e storia della fisica (former SSD: FIS/08)

Role: Full Professor

In service: 01/11/2019

University: University of Turin, Italy

Department: Department of Philosophy and Education Sciences (DFE)

ISTITUTIONAL ROLES

- **Deputy Director of DFE, University of Turin**: 2024-ongoing
- **Director of the Museum of Physics, University of Turin:** 2016-ongoing
- **Editor in chief of European Physical Journal H** - Historical Perspectives on Contemporary Physics (Springer) (**EPJ H**): 2024-2027
- **Expert reviewer appointed by the 02/D1 National Scientific Qualification Commission for the Academic discipline FIS/08 - Didactics and history of physics**: 2021-2023
- **Member of the Board of CooFIS08** (National Coordination Group of the academic discipline FIS/08 - Didactics and History of Physics): 2023-ongoing
- **Former Coordinator of the Education Sciences Section of DFE**: 2021-2024
- **Former Dean of the Master Degree in Primary Education, University of Turin:** 2016-2022

NATIONAL SCIENTIFIC HABILITATION (ASN)

- 2017: ASN to function as Full Professor in Applied physics, didactics and history of physics
- 2013: ASN to function as Associate Professor in Theoretical physics of matter (02/B2)
- 2013: ASN to function as Associate Professor in Logic, History and Philosophy of Science

OTHER INFORMATION ON THE SCIENTIFIC-PROFESSIONAL CAREER

2019-ongoing: Full Professor (FIS/08), University of Turin

2014-2019: Associate Professor (FIS/08), University of Turin

2011-2014: Research Fellow (FIS/08), University of Turin

2009-2010: **research contract** with the Department of Physics, Sapienza University of Rome

2008-2009: **research contract** with "Centro di servizi di Ateneo per la ricerca educativa e didattica" (C.A.R.E.D.), University of Genova

2006-2008: **Research Grant** (FIS/08) at the Department of Physics, University of Genova

2003-2005: **Research Grant** (FIS/08) at the Department of Physics, University of Genova

2004: **Master in Science Communication**, International School for Advanced Studies (SISSA-ISAS), Trieste

2003: **PhD in History of Science**, University of Bari

1996: **Master Degree in Physics,** University of Turin

RESEARCH ACTIVITY

SCIENTIFIC RESPONSABILITY OF INTERNATIONAL CONFERENCES

- Member of the scientific committee of the International Conference "The Faces of Nature. Between Philosophy and Artistic Reflection", Torino, 22-23 May 2018
- Coordinator of the Symposium "Internationalism of physics during the 1920s and 1930s: formation of a European research net and its impact in the development and dissemination of the European scientific culture" at the *4th International Conference of the European Society for the History of Science* (Barcelona, 18-20 November 2010)
- Scientific organization of the International Conference "Antonio Borsellino a Genova, dalla Fisica alle Nuove Scienze: la Biofisica, la Cibernetica, l'Informatica" (December 2008) at the Department of Physics, University of Genova. Editor of Proceedings.

SCIENTIFIC RESPONSABILITY OF NATIONAL CONFERENCES

- President of **Section 7 – Didactics and History of Physics** of **110° Congresso Nazionale della Società Italiana di Fisica** (Bologna, 9-13 September 2024)
- Member of the scientific committee of **IPER-HPR** – 2nd Meeting dell'Italian Physical Research and History of Physics Research organized by COOFIS08 (Naples, 30 november – 1 december 2023)
- Member of the scientific committee of **DIFIMA 2021** – X Convegno Nazionale di Didattica della Fisica e della Matematica "Apprendimento laboratoriale in matematica e fisica in presenza e a distanza" (Turin, 11-13 october 2021);
- Member of the scientific committee of **DIFIMA 2019** – IX Convegno Nazionale di Didattica della Fisica e della Matematica "Matematica e Fisica nella Cultura e nella Società" (Torino, 9-11 october 2019);
- Member of the scientific committee of **DIFIMA 2017** – VIII Convegno Nazionale di Didattica della Fisica e della Matematica "Matematica e Fisica nelle istituzioni: curriculum, valutazione, sperimentazione" (Turin, 16-18 october 2017);
- Member of the scientific committee of **XXII Congresso Nazionale di Storia della Fisica e dell'Astronomia** (Genova-Chiavari, 6-8 June 2002)

SCIENTIFIC RESPONSABILITY OF RESEARCH FELLOWSHIPS AND PHD

- **Co-supervisor of a PhD research project in Science and Mathematics Education at Universidade Estatual de Campinas (Unicamp), Brazil** ("História da Ciência como ambiente para a significação de práticas e conceitos: O caso "Volta versus Galvani": suas origens, seus entornos e suas implicações"), 2024

- **Co-supervisor of a PhD research project in Psychological, Anthropological and Pedagogical Sciences** (with E. Torre and M.L. Ruggiero), Department of Philosophy and Education Sciences, University of Turin, XXXVIII ciclo ("Un curriculum integrato di fisica moderna per la scuola primaria"), 2024-2026

- **Scientific director of a Research Grant in physics education** at the Department of Philosophy and Education Sciences, University of Turin ("Fare scienze a scuola ai tempi del Covid (e non solo)"), 2021-2022
- **Supervisor of a PhD research project in Physics and Astronomy**, University of Turin, XXXII ciclo ("Toward an integrated Museum of Physics in Piedmont"), 2016-2020

PARTICIPATION IN INTERNATIONAL RESEARCH PROJECTS

- **Team member of project HOPE (Horizons in Physics Education)** within Lifelong Learning Programme dell'UE (partner number: P52, University of Turin), 2013-2016

PARTICIPATION IN NATIONAL RESEARCH PROJECTS

- **Member of Centro Fermi's project** "Italian physicists between scientific research and public engagement: from the Congress of Vienna to the rise of the Republic", 2016-2019
- **Member of project "Radiolab"**, **INFN, Turin section,** 2014-ongoing
- **Member of PRIN-2005, Genova unit:** Fisica nucleare e subnucleare in Italia dagli anni '30 agli anni '70
- **Member of PRIN-2001, Genova unit:** Storia della fisica e dell'astronomia in Italia nel 19° e 20° secolo

PARTICIPATION IN LOCAL RESEARCH AND PUBLIC ENGAGEMENT PROJECTS

- **Scientific director of the "metAmorfosI" AI project for the University of Turin;** this project is aimed at studying the impact of artificial intelligence on secondary school and is supported by University of Turin and Politecnico of Turin with nine 3-months research grants: 2024-ongoing
- **Member of Public Engagement project on the use of the iSandbox AR machine for science education:** "Emozional=mente capiamo e costruiamo il mondo" (E=mc2), University of Turin, Savigliano campus: 2024-2025
- **Member of Public Engagement project in outdoor education:** "Flowing with the rivers", University of Turin, Savigliano campus: 2022-2023
- **Member of local research projects** (ex 60%), University of Turin: 2012-2016

PRIZES

- **2017 Donald E. Osterbrock Book Prize for Historical Astronomy**, awarded by the Historical Astronomy Division of the American Astronomical Society (AAS), as author of entries of *Biographical Encyclopedia of Astronomers*
- **Italian Physical Society (SIF) prize** for the best communication at the General Physics, Physics Education and History of Physics at the 88th SIF National Conference, Alghero 2002
- **National Academy of Sciences "detta dei XL" prize** for the best graduation thesis in history of modern physics, 1997

LECTURES TO INTERNATIONAL CONFERENCES

2022: FFP16 - Sixteenth International Symposium on Frontiers of Fundamentals of Physics - Physics Education Research section, University of Istanbul (online, 23-26 May 2022): "Pontecorvo and the detection of neutrinos";

2021: SIC 2020 XXXIX Scientific Instrument Symposium (Online, 14-18 September 2020): "Witness to disaster: an electrometer and its journey to the North Pole and back" (with F. Guerra, N. Robotti)

2019: IHPST 2019 15th International History, Philosophy and Science Teaching Conference (Thessaloniki, Greece, 15-19 July 2019): "The dust catcher: transforming dusty collections of scientific instruments into tools of education" (with M. Rinaudo)

2018: GIREP-MPTL 2018 International Conference "Research and Innovation in Physics education: two sides of the same coin" (San Sebastian, Spain, 9-13 July 2018): "The educational role of a scientific museum: a case study" (con M. Rinaudo, D. Marocchi, A. Amoroso)

2017: ESHHS-SISS 2017 Conference of the European Society for the History of the Human Sciences in collaboration with the Società Italiana di Storia della Scienza (Bari, 12-17 July 2017): "In nome della patria e della scienza: impegno civile e militare dei fisici italiani tra Ottocento e Novecento" (with F. Guerra and N. Robotti)

2017: GIREP-ICPE-EPEC 2017 International Conference "Bridging Research and Practice in Physics Teaching and Learning" (Dublin, 3-7 July 2017): "The dust catcher: discovering the educational value of the historical scientific heritage".

2016: HOPE Annual Forum 2016 - Physics Teaching in Europe and HOPE in Perspective (Constanta, Romania, 7-10 September 2016): "Physicists and the Great War: an historical-didactical exhibition" (with E. Colombi and N. Robotti);

2015: XXXIV Scientific Instrument Symposium, International Union of the History and Philosophy of Science (ASTUT, University of Turin, 7-11 September 2015): "The emergence of Macedonio Melloni's optical bench";

2014: GIREP-MPTL 2014 International Conference "Teaching/Learning Physics: Integrating Research into Practice" (Palermo, 7-12 July 2014); relazione dal titolo: "The discovery of X-rays diffraction from crystals to DNA: a case-study to promote understanding of the nature of science and of its interdisciplinary character";

2012: WCPE-2012 - The World Conference on Physics Education, Bahçeşehir Üniversitesi (İstanbul, 1-6 July 2012): "The beta decay and the conservation of energy: a historical case-study to overcome the learning difficulties in the upper secondary school";

2011: FFP12 - Twelfth International Symposium on Frontiers of Fundamentals of Physics, University of Udine and DCFA (Udine, 21-23 November 2011): "Theory vs Experiment: the case of the positron";

2010: 4th International Conference of the European Society for the History of Science, Societat Catalana d'Història de la Ciència i de la Tècnica (Barcelona, 18-20 November 2010): "Fellowships programs in the 1930s Italian physics: a survey";

2008: XXVII Scientific Instrument Symposium, International Union of the History and Philosophy of Science (Lisbon, 16-21 September 2008): "Recovering a collection of scientific instruments: the case of the scientific museum in Sanremo, Italy";

2003: XXII Scientific Instrument Symposium, International Union of the History and Philosophy of Science (Newport News, USA, September 30 - October 4, 2003): "Artificial radioactivity in Rome (1934-35): radioactive sources and Geiger-Müller counters";

2002: XXI Scientific Instrument Symposium, International Union of the History and Philosophy of Science (Athens, September 9-14, 2002): "The same discovery with different scientific instruments: The case of electric field effect on spectral lines";

1999: 2ème congrès international sur "science et technologie pour la sauvegarde du patrimoine culturel dans les pays du bassin méditerranéen", Consiglio Nazionale delle Ricerche (CNR) and Centre National de la Recherche Scientifique (CNRS) (Paris, 5-9 julliet 1999): "Science museums and their role: the experience of Physics Department's Museum of Genova University";

1997: XX International Congress of History of Science, Belgian National Committee for Logic, History and Philosophy of Science (Liège, 20-26 July 1997): "Lockyer's 'proto-elements' and the discovery of the electron".

MEMBER OF SCIENTIFIC/EDITORIAL COMMITTEES OF JOURNALS, PUBLISHERS AND LABORATORIES

- **European Physical Journal (EPJ H):** Editor in Chief
- **Laboratorio di simulazione del comportamento e robotica educativa "Luciano Gallino",** Department of Philosophy and Education Sciences, University of Turin: member of scientific committee
- **Giornale di Fisica (Società Italiana di Fisica):** member of editorial committee
- **Aracne editrice**, series "Teoria e Ricerca in Educazione": member of scientific committee

TEACHING ACTIVITY

- **Fondamenti e Didattica della Fisica:** Master degree in Primary Education, University of Turin, 2012-ongoing
  i. Two 8-credits modules at Collegno and Savigliano teaching seats of the University of Turin
  ii. Scientific responsibility of eleven 16-hours laboratories annexed to the modules
- **Storia della Fisica:** Master degree in Physics, University of Turin, 2015-ongoing
  i. One 6-credits module at the Department of Physics, University of Turin
- **Case Studies in the History of Physics:** PhD in Physics, University of Turin, 2019-2020
  i. One 2-credits module at the Department of Physics, University of Turin
- **Fisica**: post-graduate 1.5 credits module for pre-service and in-service teachers, University of Turin, Università del Piemonte Orientale, Politecnico of Turin, CIFIS, 2014-2016
- **Scienze**: 2.5 credits online module within a one-year introductory course for foreign secondary school students who do not meet the standard requirements for entry into university, Foundation Programme, University of Turin (https://foundationprogramme.unito.it/)

MAIN SCIENTIFIC PUBLICATIONS

Monographs

Leone M. (2020), *Insegnare e apprendere fisica nella scuola dell'infanzia e primaria*, Mondadori Education, Milano. ISBN: 9788861846944 (ed. cartacea); 9788861846951 (ed. digitale)

Leone M., Robotti N. (2019), *I Fisici Senatori: 1848-1943*, SIF, Bologna. ISBN: 978-88-7438-116-6

Peer-reviewed papers on international journals indexed by WoS / Scopus

dos Anjos Silva D., Rinaudo M., **Leone M.** (2025). The experiment that does not work: a discussion about the glass electrification in history and in physics textbooks, *Physics Education*, 60, 025018 (11pp). DOI: 10.1088/1361-6552/adb4b7

Leone M., Robotti N. (2024). Constructing a Nobel Prize: The Case of Madame Curie, *Physics in Perspective,* 26:3-4, 132-179. DOI: 10.1007/s00016-024-00320-x

Calvani A., **Leone M.,** Torre M. (2024). Misconoscenze di fisica nella scuola del primo ciclo: un questionario didattico, *Journal of Educational, Cultural and Psychological Studies*, 29, 3-23

Blum A., **Leone M.** (2024). Editorial, *European Physical Journal H,* 49:1, 16-17. DOI: 10.1140/epjh/s13129-024-00081-8

Blum A., **Leone M.** (2024). Editorial. Merging two journals dedicated to the history of physics, *Europhysics News*, 55:5, 10. DOI: 10.1051/epn/2024503

Rinaudo M., **Leone M.** (2024). History of physics as a heuristic device to anticipate students' ideas: the case of electrostatics, *Physics Education*, 59, 015019. DOI: 10.1088/1361-6552/ad08cd

Leone, M., Monti, F., Robotti, N. (2023). History of physics research and physics education: The case of the first electron charge measurement. *Il Nuovo Cimento C*, 46, 208-224. DOI: 10.1393/ncc/i2023-23208-5

Leone M., Robotti N. (2021). Guglielmo Marconi, Augusto Righi and the invention of wireless telegraphy, *European Physical Journal H*, 46, 16. DOI: 10.1140/epjh/s13129-021-00021-w

Ruggiero M.L., Mattiello S., **Leone M.** (2021). Physics for the masses: teaching Einsteinian gravity in primary school, *Physics Education*, 56, 065011. DOI: 10.1088/1361-6552/ac1ca3

Guerra F., **Leone M**., Robotti N. (2020). Enrico Fermi's Discovery of Neutron-Induced Artificial Radioactivity: A Case of "Emanation" from "Divine Providence", *Physics in Perspective*, 22:3, 129-161. DOI: 10.1007/s00016-020-00258-w

Leone M., Rinaudo M. (2020). Should the history of physics be rated X? A survey of physics teacher expectations, *Physics Education*, 55, 035013. DOI: 10.1088/1361-6552/ab73d1

Leone M., Robotti N., Verna G. (2019). Reply to Comment on 'Rutherford's experiment' on alpha particles scattering: the experiment that never was, *Physics Education,* 54, 066502. DOI: 10.1088/1361-6552/ab38f4

Colombi E., Guerra F., **Leone M**., Robotti N (2019). The sounds of war: phonotelemetry at the Italian front, *Physics Education,* 54, 035017. DOI: 10.1088/1361-6552/ab0907

Rinaudo M., **Leone M.,** Marocchi D., Amoroso A. (2019). The educational role of a scientific museum: A case study, *Journal of Physics. Conference Series*, 1287, 012050. DOI: 10.1088/1742-6596/1287/1/012050

Rinaudo M., **Leone M.** (2019). The dust catcher: discovering the educational value of the historical scientific heritage. In McLoughlin E. and van Kampen P. (eds). *Concepts, Strategies and Models to*

Enhance Physics Teaching and Learning. Springer International Publishing, Switzerland, 229-238. doi: 10.1007/978-3-030-18137-6

Leone M., Robotti N., Verna G. (2018). "Rutherford's experiment" on alpha particles scattering: the experiment that never was, *Physics Education,* 52, 035003. DOI: 10.1088/1361-6552/aaa353

Ferrarese S., Bertoni D., Dentis V., Gena L., **Leone M**., Rinaudo, M. (2018). Microclimatic analysis in the Museum of Physics, University of Turin, Italy: A case-study, *The European Physical Journal Plus, 133:12*, 538. DOI: 10.1140/epjp/i2018-12367-4

Colombi E., **Leone M.,** Robotti N. (2017). The emergence of Melloni's optical bench, *European Journal of Physics*, 38, 015802. DOI: 10.1088/0143-0807/38/1/015802

Guerra F., **Leone M.**, Robotti N. (2015). The discovery of X-rays diffraction from crystals to DNA: a case-study to promote understanding of the nature of science and of its interdisciplinary character. *Il Nuovo Cimento C*, 38:3, 1-10. DOI: 10.1393/ncc/i2015-15095-0

Leone M., Robotti N. (2015). Chasing the ghost particle: The long and winding road toward the detection of solar neutrinos, *American Journal of Physics*, 83, 873-880. DOI: 10.1119/1.4927486

Guerra F., **Leone M.**, Robotti N. (2014). When energy conservation seems to fail: the prediction of the neutrino, *Science & Education*, 23, 1339-1359. DOI: 10.1007/s11191-012-9567-0

Leone M. (2014). History of physics as a tool to detect the conceptual difficulties experienced by students: the case of simple electric circuits in primary education. *Science & Education*, 23, p. 923-953. DOI: 10.1007/s11191-014-9676-z

Leone M. (2014). Theory versus experiment: the case of the positron. In: B.G. Sidharth et al. (eds.). *Frontiers of Fundamental Physics and Physics Education Research*, Springer Proceedings in Physics 145, Springer, Switzerland, p. 479-485. DOI: 10.1007/978-3-319-00297-2_49

Leone M., Robotti N. (2012). An uninvited guest: The positron in early 1930s physics, *American Journal of Physics*, 80, 534-541. DOI: 10.1119/1.3695374

Guerra F., **Leone M.**, Robotti N. (2012). The discovery of artificial radioactivity, *Physics in Perspective*, 14, 33-58. DOI: 10.1007/s00016-011-0064-7

Leone M. (2011). Particles that take photographs of themselves: the emergence of the triggered cloud chamber technique in early 1930s cosmic-ray physics, *American Journal of Physics*, 79, 454-460. DOI: 10.1119/1.3545817

Leone M., Robotti N. (2010). Fréderic Joliot, Irène Curie and the early history of the positron (1932-33), *European Journal of Physics*, 31, 975-987. DOI: 10.1088/0143-0807/31/4/027

Foschi R., **Leone M.** (2009). Galileo, measurement of the velocity of light, and the reaction times, *Perception*, 38, 1251-1259. DOI: 10.1068/p6263

Radicati di Brozolo L.A., **Leone M.** (2008). On the emergence of the abstract concept of symmetry in physics, *Il Nuovo Cimento*, 123B, 121-135. DOI: 10.1393/ncb/i2008-10508-8

Leone M., Robotti N. (2008). P.M.S. Blackett, G. Occhialini and the invention of the counter-controlled cloud chamber (1931-32), *European Journal of Physics*, 29, 177-189. DOI: 10.1088/0143-0807/29/2/001

Guerra F., **Leone M.**, Robotti N. (2006). Enrico Fermi's discovery of neutron-induced artificial radioactivity: neutrons and neutron sources, *Physics in Perspective*, 8, 255-281. DOI: 10.1007/s00016-006-0296-0

Leone M., Robotti N. (2006). The entrance of quantum mechanics in Italy: From Garbasso to Fermi. In: C. Garola, A. Rossi, S. Sozzo (eds), *The Foundations of Quantum Mechanics, Historical Analysis and Open*

Questions - Cesena 2004: Cesena, Italy, 4-9 October 2004, World Scientific, Singapore, p. 225-237, DOI: 10.1142/9789812773258_0019

Leone M. (2005). On a history of Italian physics, 1945-1965, vol. 1, *Isis*, 96, 673-674. DOI: 10.1086/501408

Leone M. (2005). A history of nuclear transmutations by natural alpha particles, *European Journal of Physics*, 26, 1047-1056. DOI: 10.1088/0143-0807/26/6/012

Leone, M., Paoletti A., Robotti N. (2004). A simultaneous discovery: the case of Johannes Stark and Antonino Lo Surdo, *Physics in Perspective*, 6, 271-294. DOI: 10.1007/s00016-003-0170-2

Leone M., Robotti N. (2004). A note on the Wilson cloud chamber, *European Journal of Physics*, 25, 781-791. DOI: 10.1088/0143-0807/25/6/010

Leone M., Robotti N. (2003). Are the elements elementary? Nineteenth-Century chemical and spectroscopical answers, *Physics in Perspective*, 5, p. 360-383. DOI: 10.1007/s00016-003-0176-9

Leone M., Robotti N. (2000). Stellar, solar and laboratory spectra: the history of Lockyer's Proto-elements, *Annals of Science*, 57, 241-266. DOI: 10.1080/00033790050074156

Other peer-reviewed papers

dos Anjos Silva D., **Leone M.**, Rinaudo M., (2025). "O vidro, a história e o livro": uma discussão sobre a condutividade do vidro na história e nos livros didáticos de física", XXVI Simpósio Nacional de Ensino de Física (Niterói, RJ, Brazil, 20-24 janeiro 2025): https://hub.aptor.software/snef2025/show.php

Torre M., **Leone M.** (2024). Misconoscenze di fisica nella scuola del primo ciclo, *Periodico di Matematica*, 6:3, 255-275

Leone M. (2024). La sconfitta dell'horror vacui, *Asimmetrie*, 37, 34-35

Leone M., Robotti N. (2021). Wilhelm Conrad Rontgen: dalla scoperta dei raggi X al primo premio Nobel in Fisica", *Giornale di Fisica*, 62:3, 379-400. DOI: 10.1393/gdf/i2021-10416-8

Colombi E., Guerra F., **Leone M.**, Robotti N. (2021). Aldo Pontremoli e la spedizione del dirigibile 'Italia', *Quaderni di Storia della Fisica*, 25:1, 109-142. DOI: 10.1393/qsf/i2021-10085-8

Leone M., Robotti N. (2020). Augusto Righi, *Giornale di Fisica*, 61:3, 337-358. DOI: 10.1393/gdf/i2020-10384-5

Guerra F., **Leone M.**, Robotti N. (2019). La prima trasmutazione artificiale del nucleo e la scoperta del protone (Rutherford 1919) - The first nuclear artificial transmutation and the discovery of the proton (Rutherford 1919), *Giornale di Fisica*, 60:4, 445-458. DOI: 10.1393/gdf/i2020-10353-0

Colombi E., Guerra F., **Leone M**., Robotti N. (2019). I Fisici Italiani in Guerra: 1915-1918, *Quaderni di Storia della Fisica*, *21:1*, 29-60. ISSN 1594-9974. DOI: 10.1393/qsf/i2019-10054-x

Giorda C., **Leone M.**, Morselli F., Sabena C. (2014). Lo spazio in geografia, fisica e matematica. Un concetto ponte per didattiche interdisciplinari? *Ambiente Società Territorio*, vol. LVIV (XIV), n. 3, pp. 10-15, ISSN 1824-114X

Leone M. (2009). Camere, Contatori, Coincidenze. Le vie nuove aperte da Bruno Rossi e da Beppo Occhialini, *Giornale di Fisica, 50:4,* 241-254. DOI: 10.1393/gdf/i2009-10112-y

Leone M., Paoletti A, Robotti N. (2009). La Fisica nei "Gabinetti di Fisica" dell'Ottocento: il caso dell'Università di Genova, *Giornale di Fisica, 50:3,* 139-152. DOI: 10.1393/gdf/i2009-10106-9

Leone M., Paoletti A, Robotti N. (2008). Patrimoni da valorizzare: gli strumenti storico-scientifici delle scuole e degli osservatori della Liguria, *Museologia Scientifica. Memorie, 2*, 266-270. ISSN: 1972-6848

Acocella G., Guerra F., **Leone M.**, Robotti N. (2007). The Oscar D'Agostino Archives in Avellino, *Physis. Rivista Internazionale di Storia della Scienza*, 44, 203-233. ISSN 0031-9414

Leone M., Mastroianni A., Robotti N. (2005). Bruno Rossi and the introduction of the Geiger-Muller counter in Italian physics: 1929-1934, *Physis. Rivista Internazionale di Storia della Scienza*, 42, 453-480. ISSN 0031-9414

Leone M., Robotti N., Segnini C.A. (2000). Fermi Archives at the Domus Galilaeana in Pisa, *Physis. Rivista Internazionale di Storia della Scienza*, 37, 501-533. ISSN 0031-9414

Papers in proceedings of international conferences

Battaglia O.R., Esposito S., Fazio C., Giliberti M., **Leone M.**, Michelini M., Robotti N., Testa I. (2025). IPER 2022 – A study conference on Physics Education Research in Italy. In: *4th World Conference on Physics Education – Embracing Changes Together* (Krakow, Poland, 26-30 August 2024), in press.

Rinaudo M., **Leone M.** (2019). The dust catcher: transforming dusty collections of scientific instruments into tools of education. In Seroglou F. and Koulountzos V. (eds). *Re-introducing Science: Sculpting the image of science for education and media in its historical and philosophical background* – IHPST2019 Conference Proceedings (Thessaloniki, Greece, 15-19 July 2019), 190-198. ISBN 978-618-5271-79-4

Guerra F., **Leone M.**, Robotti N. (2014). The discovery of X-rays diffraction from crystals to DNA: a case-study to promote understanding of the nature of science and of its interdisciplinary character. In: C. Fazio, R.M. Sperandeo Mineo (eds.), *Teaching/Learning Physics: Integrating research into practice.* Proceedings of the GIREP-MPTL 2014 International Conference (Palermo, July 7-12, 2014), Università di Palermo, pp. 981-988. ISBN: 978-88-907460-7-9

Leone M., Robotti N. (2014). The beta decay and the conservation of energy: a historical case-study to overcome learning difficulties in the upper secondary school. In: M.F. Taşar (ed.). *Proceedings of the World Conference of Physics Education 2012*, Pegem Akademi, Ankara, Turkey, p. 495-499. ISBN 978-605-364-658-7

Leone M., Robotti N. (2002). Lockyer's 'proto-elements' and the discovery of the electron. In: H. Kragh, G. Vanpaemel, P. Marage (eds.), *History of Modern Physics*. *Proceedings of the XXth International Congress of History of Science* (Liege, July 20-26, 1997), Brepols, Turnhout, p. 197-203. ISBN: 978-2-503-51200-6

Biographical entries in international encyclopedia

Leone M., Robotti N. (2014). Compton, Arthur Holly. In: T. Hockey et al (eds.), *Biographical Encyclopedia of Astronomers*. 2nd edition, p. 449-451, Springer, New York. ISBN 978-1-4419-9916-0

Leone M., Robotti N. (2014). Fowler, Alfred. In: T. Hockey et al (eds.), *Biographical Encyclopedia of Astronomers*. 2nd edition, p. 744-745, Springer, New York. ISBN 978-1-4419-9916-0

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