GIOVANNI LOSURDO

Curriculum Vitae - Academic Profile

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Scientific profile

Experimental physicist specializing in gravitational-wave detection, with extensive scientific and technical leadership experience in the Virgo Collaboration and the Advanced Virgo project. Key contributions span seismic isolation, mirror suspension control, detector commissioning, and the leadership of Advanced Virgo from design and R&D through full operation. Former Spokesperson of the Virgo Collaboration, currently Professor of Experimental Physics at Scuola Normale Superiore and R&D Coordinator for the Einstein Telescope.

Key academic and scientific leadership roles

2026-	Einstein Telescope Collaboration – R&D Coordinator
2024-present	Professor of Experimental Physics, Scuola Normale Superiore, Pisa
2025-present	Deputy Director for students and teaching, Scuola Normale Superiore
2020-2023	Spokesperson of the Virgo Collaboration
2009-2017	Advanced Virgo Project Leader; coordinated 200+ scientists from six countries and managed an investment budget of about EUR 24M
2006-2009	Advanced Virgo Coordinator

Education

1999	PhD in Physics, Scuola Normale Superiore, Pisa, cum laude
1993	Laurea in Physics, University of Pisa, cum laude

Academic and research appointments

2024-present	Professor of Physics, Scuola Normale Superiore, Pisa
2018-2024	Dirigente di Ricerca, INFN Pisa
2016-2018	Primo Ricercatore, INFN Pisa
2009-2016	Primo Ricercatore, INFN Firenze
2009-2015	European Gravitational Observatory, collaboration contract as Advanced Virgo Project Leader
2004-2008	Ricercatore, INFN Firenze
2000-2004	Post-doc, INFN Firenze
1998-2000	Post-doc, INFN Pisa

Major scientific achievements

- **Virgo and Advanced Virgo leadership** Served as Virgo Collaboration Spokesperson and as Advanced Virgo Project Leader for the full project phase, from construction and commissioning to the start of data taking in 2017.
- **Advanced Virgo and first detections** Led the project that brought Advanced Virgo into the global gravitational-wave detector network. Advanced Virgo made its first detection, GW170814, on 14 August 2017 and played a crucial in the historic multi-messenger event GW170817 on 17 August 2017.
- **Detector technology** Designed and realized the Inverted Pendulum pre-isolator for the Virgo superattenuator, including its active control strategy; the technology was later adopted by KAGRA and is planned for use in the Einstein Telescope.
- **Commissioning and control** Developed the hierarchical control strategy for the Virgo mirrors and contributed extensively to detector commissioning and noise-source investigations.
- **Future detectors** Contributed to the early development of third-generation detectors, including the Einstein Telescope design study, and initiated the Virgo_nEXT planning effort as Virgo Spokesperson.

Awards and honors

2019-present	Accademia Nazionale dei Lincei - Socio Corrispondente
2018	Premio L. Tartufari per la Fisica e la Chimica - Accademia dei Lincei
2017	Commendatore dell'Ordine al Merito della Repubblica Italiana - upon initiative of the President of the Republic
2016	Premio internazionale Galileo Galilei per la scienza
2017	Einstein Medal - shared with the LIGO and Virgo Collaborations
2016	Special Breakthrough Prize in Fundamental Physics - shared with the LIGO and Virgo Collaborations
2016	Gruber Cosmology Prize - shared with the LIGO and Virgo Collaborations

Publication record

394 papers; 101444 citations; h-index: 104 (Scopus, as of 6 November 2026).

Complete publication list: ORCID profile.

For collaborative gravitational-wave papers, this CV foregrounds scientific, technological, and leadership contributions in Virgo, Advanced Virgo, Virgo_nEXT, and Einstein Telescope activities.

Research profile and contributions

Long-term role in Virgo. Involved in the Virgo experiment since 1992, with contributions across early R&D, design, construction, commissioning, management, and strategic planning.

R&D and superattenuator. Until 2000, research activity was mainly devoted to the design and realization of the Virgo superattenuator, the isolation system developed to isolate the mirrors from external vibrations and control their position. This work helped make Virgo the most sensitive first-generation gravitational-wave detector in the low-frequency range.

Commissioning. Between 2000 and 2006, deeply involved in detector commissioning and in the investigation of noise sources, with particular responsibility for mirror control strategies.

Advanced Virgo design. From 2004, involved in the design of Advanced Virgo. From July 2006 to April 2009, served as Advanced Virgo Coordinator, coordinating R&D activities and the preparation of the Conceptual Design and related project documents.

Advanced Virgo project leadership. Appointed Advanced Virgo Project Leader by INFN and CNRS in April 2009. Coordinated more than 200 scientists from six countries and managed an investment budget of about EUR 24M until the formal end of the project on 1 August 2017 (start of the Advanced Virgo data taking in the O2 observing run).

Virgo_nEXT. As Virgo Collaboration Spokesperson, initiated the planning effort for Virgo_nEXT, a substantial upgrade intended to sustain an ambitious gravitational-wave science program in the 2030s and bridge the gap between existing detectors and third-generation observatories.

Einstein Telescope. Member of the Einstein Telescope science team that prepared the design study and of the team that wrote the ET proposal for the ESFRI application.

Institutional, international and science-policy roles

Scuola Normale Superiore

2025-present	Deputy Director for students and teaching
2025-present	Chair, Presidio per l'Assicurazione della Qualità (PQA)
2025-present	Member, Commissione Alta Formazione e Orientamento

Einstein Telescope Project

2026-	R&D Coordinator of the ET Collaboration

Virgo experiment

2020-2023	Virgo Spokesperson
2009-2017	Advanced Virgo Project Leader
2006-2009	Advanced Virgo Coordinator
2006-2008	Member of the Virgo Speakers Bureau
2003-2008	Responsible for the INFN Florence laboratory dedicated to R&D for advanced interferometers
2005-2006	Coordinator of the work package 'monolithic suspension' for the Virgo detector upgrade
2004-2006	Responsible for MSC (Mirror Suspension Control) activities in Virgo
2004-2005	Member of the group responsible for the Advanced Virgo 'white paper'
2003-2004	Convener of the Virgo Collaboration Meetings
2002-2003	Coordinator of the analysis of seismic-noise effects on Virgo

INFN

2022	Member of the committee for the recruitment of INFN researchers, national call n. 23522/21
2018	Member of the committee for the recruitment of INFN researchers, national call n. 20010/18
2014	Member of the national working group on gravitational waves in the INFN 'What Next' strategy initiative
2006-2009	Member of the INFN National Scientific Committee II, Astroparticle Physics
2006-2009	Coordinator of the area 'Astroparticle and general physics', INFN Firenze

International roles, science policy and diplomacy

2025-present	Member, International Gravitational Wave Network (IGWN) Program Committee
2022-present	Member, SICA - Committee on International Security and Armament Control, Accademia dei Lincei
2020-present	Member, Gravitational Wave International Committee (GWIC)
2017	Speaker at the press conference announcing the first event detected by Virgo (GW170814), Meeting of the G7 Science Ministers, Torino

2016	Virgo representative at the Washington DC press conference announcing the discovery of gravitational waves
2013	Member of the Virgo committee negotiating the status of 'CERN Recognized Experiment'
2013	Member of the committee negotiating the LIGO-Virgo MoU
2005-2007	Director of the International VESF school on gravitational waves
2003-2009	Working Group Chair, ILIAS-GWA European project, Framework Programme 6

Short-term visiting positions

2019	Chercheur invité de l'Université Paris Diderot, Paris
2007	Visiting scientist, Massachusetts Institute of Technology
2003	University of Glasgow, Institute for General Relativity
2002	University of Glasgow, Institute for General Relativity
2001	University of Tokyo
2000	California Institute of Technology
1999	California Institute of Technology
1997	University of Western Australia, Perth

Teaching, PhD supervision and academic qualification

Teaching

2024-2026	Experimental Physics of Gravitational Waves, Scuola Normale Superiore - 40 hours - Master/PhD
2025-2026	Introduction to Astroparticle Physics, Scuola Normale Superiore - 20 hours - Bachelor
2024-2025	Experimental Physics of Fundamental Interactions, Scuola Normale Superiore, shared with Prof. M. Morello - 40 hours - Master
2021, 2022	Lectures on general relativity and gravitational waves in Experimental High Energy Physics, Scuola Normale Superiore
2000-2009	Doctoral course 'Gravitational Waves', PhD School, University of Florence
1997-2001	Assistant, General Physics, Informatics/Mathematics degree, University of Pisa

PhD supervision and thesis evaluation

2026-	Director of the PhD thesis of Mario De Vita, Scuola Normale Superiore
2025-	Director of the PhD thesis of Elisa Bigongiari, Scuola Normale Superiore
2005-2007	Co-director of the PhD thesis of Matteo Lorenzini, Department of Astronomy, University of Florence: 'Suspension thermal noise issues for advanced GW interferometric detectors'
2007-2018	Referee of PhD theses by J.S. Hennig (University of Glasgow, 2018), E. Capocasa (Université Paris-Diderot, 2017), F. Qi (University of Western Australia, 2015), F. Torres (University of Western Australia, 2014), M. Granata (Université Paris-Diderot, 2010), and B. Lee (University of Western Australia, 2007)

Peer review, panels and project evaluation

Journals	Referee for Physical Review Letters, Science, Physical Review Applied, Physical Review D, Classical and Quantum Gravity, Applied Optics, Review of Scientific Instruments, Nuclear Instruments and Methods
Funding agencies	Reviewer of research projects for NSF (US), STFC (UK), SNSF (CH), NFKI (Hungary)
2023	Member, ERC Consolidator Grant Panel PE2
2021	Member, ERC Consolidator Grant Panel PE2
2019	Member, ERC Consolidator Grant Panel PE2
2014	Member, External Review Committee of the KAGRA project
2010-2015	Member, Advanced LIGO Program Advisory Panel (US)
2003	Member, National Science Foundation Review Panel for Advanced LIGO

Prize committees

2026-present	Aspen Institute Italy - Premio Aspen Institute Italia per la collaborazione e la ricerca scientifica tra Italia e Stati Uniti
2026	Accademia dei Lincei - Premio 'Tito Maiani'
2025	Accademia dei Lincei - Premio 'Tito Maiani'
2023	Accademia dei Lincei - Premio Internazionale 'Antonio Feltrinelli' per la Fisica
2023	Accademia dei Lincei - Borse di studio 'Enrico Persico'
2021	Accademia dei Lincei - Premio 'Tito Maiani'
2020	Accademia dei Lincei - Premio 'Tito Maiani'

Organization of conferences and schools

2020	Probing the universe with multi-messenger astronomy, Genova - SOC member
2019	EWASS2019, Lyon - SOC member
2018	Marcel Grossman 15th Conference, Rome - GW7 session chair
2007	VESF international school on gravitational waves, Cascina - Director

2006	VESF international school on gravitational waves, Cascina - Director
2005	Workshop 'Toward a 3rd generation European Gravitational Wave Observatory', Perugia - Advisory Committee member
2002	5th Amaldi Conference on Gravitational Waves, Tirrenia - LOC member

Selected invited talks - international conferences and workshops

2025	Pisa, Gravity, Strings and Supersymmetry Breaking - 'Ground based GW detectors: a review', invited talk
2024	Rome, GEMMA2 workshop - 'LIGO/Virgo/KAGRA: current status and future directions', invited talk
2023	La Thuile, Les Rencontres de Physique de la Vallee d'Aoste - 'Bridging the generation gap for GW detectors', invited talk
2022	La Thuile, Les Rencontres de Physique de la Vallee d'Aoste - 'Looking out through a new window on the universe', invited talk
2021	Moscow, 20th Lomonosov Conference - 'Doing science with GW', invited plenary talk
2019	Portsmouth, 30th Texas Symposium on Relativistic Astrophysics - 'GW ground based detectors', invited plenary talk
2019	Rome, 1st European Physical Society Conference on Gravitation - 'GW observations on the Earth', invited plenary talk
2018	Kolimvari, ICNFP2018 - 'GW observations: achievements and perspectives', invited plenary talk
2017	Pasadena, 12th Amaldi Conference - 'The second observing run', invited talk on behalf of LIGO-Virgo
2016	LNGS, 99th Plenary ECFA meeting - 'The detectors exploring the GW universe', invited talk
2015	Silver Spring, Workshop 'What comes next for LIGO' - 'Advanced Virgo', invited talk
2013	Warsaw, 10th Amaldi Conference - 'Advanced Virgo', invited talk on behalf of Virgo
2011	Cardiff, 9th Amaldi Conference - 'Overview of 1st and 2nd generation detectors', invited plenary talk
2008	Austin, AAS Winter meeting - The next generation of ground based GW detectors, invited talk
2007	Manchester, EPS HEP07 - Next generations of GW interferometric detectors
2006	Moscow, ICHEP2006 - LIGO and Virgo: large interferometers searching for gravitational waves
2006	Isola d'Elba, GWADW - The control of the superattenuator: present and future
2005	Warwick, IoP2005 - Virgo: status and perspectives, invited talk
2005	Munich, 1st European Astroparticle Town Meeting - Infrastructure for 3rd generation detectors
2003	CERN, Workshop on Cosmology and Particle Physics - 'Interferometer experiments', invited keynote talk

Selected invited talks - national conferences

2018	Milano, IFAE 2018 - From GW170817 to the Einstein Telescope, invited talk
2017	Trento, 103rd Congresso SIF - Advanced Virgo and the start of multi-messenger astronomy, invited talk
2014	Alessandria, XXI SIGRAV Conference - Advanced Virgo and the worldwide search for GW, invited talk
2010	Rome, IFAE 2010 - Searching for gravitational waves
2010	Pisa, SIGRAV - Searching for gravitational waves, on behalf of LSC/Virgo
2008	Cosenza, SIGRAV - Virgo: the challenge of opening a new window on the universe

Selected colloquia

2019	Almo Collegio Borromeo, Pavia
2018	Università di Bologna, Joint Astronomical Colloquium
2018	Scuola Normale Superiore, Colloquio della Classe di Scienze
2018	Université de Genève, Colloque de Physique
2018	Università di Firenze
2017	Università di Ferrara
2017	Osservatorio Astronomico di Brera, Milano
2016	Università di Lecce; Università di Bari; Università di Firenze
2016	Università di Pisa - Gravitational Wave Festival
2014	Università di Genova
2010	European Southern Observatory, Garching - Munich Joint Astronomy Colloquium
2007	Massachusetts Institute of Technology
2006	European Southern Observatory, Garching
2005	National Astronomical Observatory of China
2002	University of Glasgow, Institute of General Relativity
2001	University of Birmingham
2001	University of Tokyo
2000	European Southern Observatory, Garching
1999	California Institute of Technology; Stanford University
1997	University of Western Australia

Public engagement and science communication

Public lectures, round tables, interviews and contributions for BBC, Euronews, RAI, El Mundo, Wired UK, La Repubblica, La Stampa, and other national and international media.

2022	Podcast 'Virgo: l'universo si fa suono', produced by RAI - main role
2022	Documentary 'Gravità', Rai Cultura
2016	RAI 'Presadiretta'; documentary 'Le onde gravitazionali'; RAI Scuola 'Memex'
2014	Spacelab, RaiNews 24
2007	Documentary 'Cosmos: a beginner's guide', BBC
2018	G. Losurdo and F. Ricci, 'Quando è arrivata l'astronomia multi-messaggero', Le Scienze
2017	G. Losurdo and F. Ricci, 'L'era delle onde gravitazionali', Le Scienze

Selected public and educational lectures

2026	Accademia dei Lincei, Corso di orientamento SNS
2025	San Miniato, Corso di orientamento SNS
2022	Kabare, Livorno; Lincei per la scuola, Scuola Normale Superiore
2021	SWIM Conference, Cascina; SSM School on GW, Napoli
2020	Accademia dei Lincei, Corso di orientamento SNS; National Geographic Festival delle Scienze, Rome
2019	Accademia dei Lincei, Corso di orientamento SNS
2018	Festival della Scienza, Focus Festival, Wave on the lakes, Agora della Scienza, Scuola Superiore Sant'Anna, and other public/educational lectures
2016-2017	Public lectures at Ludoteca Scientifica Pisa, I Cieli di Brera, Arcetri Observatory, Caffèscienza Firenze, CNR Pisa, and other events

Pisa, November 2026