

STEFANO VITALE
Curriculum Vitae
(12-08-2015)

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1 General

Born in Naples (Italy) Sept 6, 1951. Married. Two children.

Education: “Laurea” in Physics, Summa cum Laude, University of Rome (Italy) October 25, 1976.

2 Appointments

- 1977-79 Research fellow, University of Trento, Italy
- 1980-85 Assistant professor (Tenure) Condensed Matter Physics, University of Trento.
- 1985- Research associate (Incarico di Ricerca), Istituto Nazionale di Fisica Nucleare (INFN)
- 1985-93 Associate professor of Physics, University of Trento
- 1992 Visiting Professor, Department of Physics, University of California at Berkeley.
- 1994- Full professor of Physics, University of Trento.
- 1997-98 Visiting Scholar, University of California at Berkeley and Stanford University.

3 Main scientific responsibilities

- 1988-2001;
2005- Head of the Laboratory for Experimental Gravitation, Department of Physics, University of Trento
- 1989-2003 co-Principal Investigator (PI) and Deputy Spokeperson of INFN’s AURIGA experiment: an ultra-cryogenic acoustic Gravitational Wave (GW) detector at Laboratori Nazionali di Legnaro of INFN.
- 2003-2013 Principal Investigator of the LISA Technology Package payload on board the LISA Pathfinder mission of the European Space Agency (ESA). LISA Pathfinder is a precursor to a spaceborne GW observatory, and the LTP is the only scientific instrument on board the mission.

4 Service on international academic bodies

- 1995-96 Member of ESA’s study team for the STEP (Satellite Test of The Equivalence Principle) mission.
- 1995-2000 Member of the LISA (Laser Interferometer Space Antenna) Study Team of ESA (Horizon 2000 Cornerstone study)
- 1996-97 Member of ESA’s Fundamental Physics Advisory Group (FPAG)
- 1998-2002 Vice-chair of Commission H, Fundamental Physics in Space, of Committee for Space Research (COSPAR).
- 1998-2002 Member of the European Space Science Committee (ESSC) of the European Science Foundation (ESF).
- 2000-2003 Chair of ESA’s Fundamental Physics Advisory Group (FPAG)
- 2000-2003 Member of ESA’s Space Science Advisory Committee (SSAC)
- 2000-2002 Chair of the Review Panel of ESA’s Space Science Department
- 2001- Member of the Gravitational Wave International Committee (GWIC), a sub-committee of the International Union for Pure and Applied Physics.

2001-2011	Member of the LISA International Science Team (ESA/NASA)
2003	Chair of the “Space and Society” cross-disciplinary perspective group (XPG) within ESA exercise to formulate the Cosmic Vision Program.
2003-2012	Member of the Fachbairat (Review Committee) of the Max-Planck Institute for Gravitational Physics (Albert Einstein Institute).
2004-2005	ESA-ESF exercise on the evaluation of the ELIPS program. Chair of the Fundamental Physics Panel.
2006-2009	Member of the Scientific and Technical Advisory Committee to the European Gravitational Observatory (EGO). A laboratory hosting the ground-based interferometric GW detector VIRGO, of INFN and CNRS (Centre Nationale pour la Recherche Scientifique)
2006	Member of the ESA’s Life and Physical Science Advisory Committee
2006	Member of the review committee of the Laboratoire de Annecy-le-vieux de Physique de Particules (LAPP) of Centre National de la Recherche Scientifique (CNRS)
2007-09	Member of ESA’s Human Spaceflight, Microgravity and Exploration Advisory Committee
2007-08	Member of the Astronet Roadmap Panel A: High energy, astroparticle, gravitational waves
2009-2010	Member of the gravitational waves roadmap committee of GWIC
2011-2012	Member of the study team of ESA’s New Gravitational Observatory (L1 mission selection)
2012-2013	Member of ESA’s Technology Activities Scientific Advisory Committee for the future Gravitational Wave mission dell’European Space Agency.
2012-2013	Chair of the Payload Scientific Review Committe of ESA’s STE-QUEST mission study (M3 selection).
2013	Member of the Gravitational Wave Grant review panel of the Science and Technology Facility Council of UK.
2014-	Member of ESA’s Gravitational Observatory Advisory Committee (GOAT) (L3 mission)
2014	Member of the search committee for the new chair of the ESSC
2015	Member of the Senior Scientist Committee for ESA’s M4 selection

5 Service on national academic bodies

2006-	Member of COSPAR’s Italian committee
2008-2012	Member of the Standing Review Board (Nucleo di Valutazione) of the University of Verona, Italy
2010-2011	Member of the Board (Consiglio di Amministrazione) of the Italian Space Agency (ASI) as a wiseman for the formulation of the agency statutes
2013-	Italian National Institute for Astrophysics (INAF) advisory committee for Industrial Policy, Innovation and Technology Transfer.
2015	Chair of the search committee for ASI Director General

2015- Scientific Advisor to the Italian Delegation to the Science Program Committee (SPC) of ESA

6 University management responsibilities

1990-94;
1996-2001 Member of the Board of Directors (Consiglio di Amministrazione) of the University of Trento, Italy.
1990- Director of Consorzio Criospazio Ricerche, a research consortium of the Universities of Trento and Padua, the INFN, the Trento Chamber of Commerce, and the CARITRO foundation.
1994-96 Rector's¹ delegate for Industry Liaison. University of Trento. In charge of setting up and conducting the University-Industry Liaison office.
1995-97 Head of the School in Material Science, University of Trento.
1998-2001 Vice-Rector (vice-rettore) for scientific research University of Trento. In charge of research budget planning, and research departments performance evaluation.
2001-2004 Deputy Rector (Prorettore Vicario) University of Trento, also maintaining the functions of vice-rector for research.

7 Other grants

1986-89 Consiglio Nazionale delle Ricerche (CNR). Joint Poland-Italy Project. "Josephson Junction by Ion Implantation"
1987-90 CNR. Progetto Finalizzato "Tecnologie Superconduttive e Criogeniche" "rf SQUID with Cryogenic Amplifier"
1990-95 CNR "Noise in Josephson devices"
1990-94 CNR. Progetto Finalizzato "Tecnologie Superconduttive e Criogeniche" "Short thermal time auxiliary cryostat for GW antennae"
1994-97 NATO linkage grant "Near quantum limited SQUIDS"
1994-1998 European Union Human Capital and Mobility Network. "Tunneling in magnetic nanosystem" Italian Partner
1995-98 ESA "Gravity Explorer Mission" pre Phase A and Phase A Studies. Subcontractor to Alenia Spazio
1994-01 ASI "STEP and LISA"
1998-99 Italian Ministry for University and Research (MIUR) Progetto PRIN "Data Analysis for gravitational wave detectors", head of the Trento Unit.
1999-2001 ESA, ESTEC/Contract n. 13691/99/NL/FM(SC) "Drag-Free" Spacecraft Control. Prime contractor
2000-2013 INFN Experiment "LISA Pathfinder"
1999-2000 ESA, ESTEC contract 13631/88/NL/MS, LISA industrial study, Subcontractor to Dornier GmbH
2000-2002 MIUR Progetto PRIN "Data Analysis for gravitational wave detectors" National Principal Investigator

¹ The Rector, within the Italian system, is the head of the University.

2001-2003	ESA ESTEC Contract15580/01/NL/HB “Lisa Technology Package Architect” Prime Contractor
2001-2003	ESA ESTEC Contract “Inertial Sensor Definition for LISA” General technical coordination office as subcontractor to Carlo Gavazzi Space
2003-2005	MIUR Progetto PRIN ”Inertial sensors for "drag-free" navigation and ground based test-methods” National Principal Investigator
2003-2004	ESA ESTEC contract “Enabling Observation Techniques for Future Solid Earth Missions”. Subcontractor to ASTRIUM
2003-2014	ASI LISA/LISA Pathfinder Principal Investigator
2004-2006	ESA ESTEC contract “Ground Testing for LISA Inertial Sensor” Prime contractor 18223/04/NL/AG

8 Patents

1988 Gyromagnetic Electron Gyroscope European Patent #88830265. US Patent 07/210,432.

9 Referee for

9.1 Agencies and funding bodies for project evaluation

Agenzia Spaziale Italiana
 European Research Council (Declined for conflict of interest)
 European Space Agency.
 Istituto Nazionale di Fisica Nucleare
 Italian Ministry for University and Research
 Miller Foundation (California)
 National Science Foundation (USA)
 Particle Physics and Astronomy Research Council (UK)
 Portuguese Ministry for Science and Education
 Science and Technology Facilities Council (UK)
 Swedish Research Council

9.2 Universities and other academic institution for recruitment or promotions

California Institute of Technology
 Centre Nationale de la Recherche Scientifique
 ESA
 ETH Zurich
 Imperial College
 John Hertz Foundation
 Leibniz Universität Hannover
 Max-Planck Society
 NASA
 Stanford University
 Universidad de Barcelona
 University of Alberta
 University of California at Berkeley
 University of Florida
 University of Glasgow
 University of Louisiana

University of Washington
 University of Wisconsin

9.3 Journals

Astrophysical Journal
 Advances in Space Research
 Classical and Quantum Gravity
 Journal of Applied Physics
 Optics Letters
 Nature
 Physical Review D
 Physical Review Letters
 Physics Letters

10 Scientific Committees of International conference (after year 2000)

Year	Conference	Role
2000	International Symposium on “Testing the Equivalence Principle in Space”, Loch Lomond, Scotland	Scientific Programme Committee
2000	IX Marcell Grossmann Meeting on General Relativity, Rome, Italy	Local Organizing Committee
2000	3 rd International LISA Symposium, Gölm, Germany	Scientific Programme Committee
2000	ESA-CERN Workshop on Fundamental Physics in Space, CERN, Geneva	Scientific Programme Committee
2001	Fourth International E. Amaldi Conference on Gravitational Wave Experiments, Perth, Australia	Scientific Programme Committee and Session Convener
2001	6 th Gravitational Wave Data Analysis Workshop, Trento	Chairman Scientific Programme Committee
2002	ESA-ESO-CERN symposium	Scientific Programme Committee
2002	4 th International LISA Symposium, Penn State, PA, USA	Scientific Programme Committee
2002	SPIE conference on Instrumentation, Hawaii, USA	Session Scientific Programme Committee
2002	Space-Part. International Symposium on Cosmology, Astrophysics and Fundamental Physics. Elba Italy	Scientific Programme Committee
2002	Forth International LISA Symposium, State College PA	Scientific Programme Committee and Session Convener
2002	7 th Gravitational Wave Data Analysis Workshop Kyoto	Scientific Programme Committee and Session Convener
2003	5 th Amaldi Conference on Gravitational Waves	Scientific Programme Committee and Session Convener

2003	8 th Gravitational Wave Data Analysis Workshop Milwaukee	Scientific Programme Committee
2004	COSPAR Symposium on Gravitational Waves in Fundamental Physics and Astronomy, Paris	Main Scientific Organiser
2003	Space-Part 3. International Symposium on Cosmology, Astrophysics and Fundamental Physics. Washington DC	Scientific Programme Committee
2004	17 General Relativity and Gravitation conference, Dublin	Scientific Programme Committee
2004	5 th LISA Symposium, Nordwijk	Scientific Programme Committee and Session Convenor
2005	6 Amaldi Conference Japan	Scientific Programme Committee
2006	Space-Part 4	Scientific Programme Committee
2006	6 th International LISA Symposium, Goddard Space Flight Center (Washington dc)	Scientific Programme Committee
2007	7 th Edoardo Amaldi Conference on Gravitational Wave, Sidney	Scientific Programme Committee and session convenor
2008	7 th International LISA Symposium, Barcelona	Scientific Programme Committee
2008	25th International Conference on Low Temperature Physics, LT25	Programme Advisory Board
2009	8 th Edoardo Amaldi Conference on Gravitational Wave, Sidney	Scientific Programme Committee and session chair
2010	8 th International LISA Symposium, Stanford University	Scientific Programme Committee and session chair
2010	19 th International Conference on General Relativity and Gravitation. Mexico City	Session convenor
2010	25th Texas Symposium on Relativistic Astrophysics, Heidelberg	Session Convenor
2011	Gravitational Wave Advanced Detectors Workshop Elba, Italy May 22-28	Session Convenor
2012	9 th LISA Symposium APC, Paris, May 2012	Scientific Programme Committee
2012	13 Marcel Grossman Conference Stockholm July 2012	Session Convenor and Chair
2012	Space parts 2012. CERN Switzerland	Scientific Programme Committee and session chair
2013	10th Edoardo Amaldi meeting on Gravitational waves Warsaw	Scientific Programme Committee
2014	10 th LISA Symposium, Gainesville, Florida, USA	Scientific Programme Committee and session chair

2015 14 Marcel Grossman Conference Rome July 2015 Local Organizing Committee

11 Invited talks to international conference (after year 2000)

Year	Conference	Title
2000	IX Marcel Grossman Meeting on General Relativity, Rome, Italy	<i>Sensors of Geodetic Motion for LISA</i>
2000	3 rd International LISA Symposium, Gölm, Germany	<i>Sensors of Free Fall for LISA</i>
2000	ESA-CERN Workshop on Fundamental Physics in Space, CERN, Geneva	<i>Free-Fall Technology for Fundamental Physics Missions</i>
2000	Symposium on Fundamental Physics in Space, COSPAR General Assembly, Warsaw, Poland	<i>STEP</i>
2000	Symposium in Honor of Martin Huber, ESA-ESTEC, Noordwijk, The Netherlands	<i>Fundamental Physics in Space</i>
2000	"Gravitational Waves: A Challenge To Theoretical Astrophysics" , ICTP, Trieste, Italy	<i>LISA</i>
2000	5 th Gravitational Wave Data Analysis Workshop, Baton rouge LA	<i>Non-gaussian/non-stationary noise as "events": the bar experience</i>
2001	ESA-Portugal symposium on ESA's fundamental physics programme	<i>LISA</i>
2001	Fourth International E. Amaldi Conference on Gravitational Wave Experiments, Perth, Australia	<i>"LISA in Europe: an update"</i>
2001	TAUP2001	<i>"LISA"</i>
2001	International Conference On Advanced Technology And Particle Physics, Como, Italy	<i>"LISA and SMART-2"</i>
2002	ESA-CERN-ESO Symposium, Garching, Germany March 2002	<i>Fundamental Physics with Space Experiments</i>
2002	"Space Part" International Symposium, Elba, Italy	<i>Fundamental Physics with Space Experiments</i>
2002	Fourth International LISA Symposium, State College PA	<i>SMART - 2</i>
2002	ESA 5 th International Conference on Guidance and Navigation	<i>Drag-Free Control in Fundamental Physics Experiments (Keynote lecture)</i>
2002	International School on Space Science, Cosmology and Fundamental Physics in Space, Laboratori Nazionali del Gran Sasso	<i>Observation of Gravitational Waves from Space</i>
2002	7 th Gravitational Wave Data Analysis Workshop, Kyoto	<i>LISA (Keynote lecture)</i>

2003	5 th International Amaldi Conference on Gravitational Waves, Tirrenia, Italy	<i>The LISA Pathfinder Mission</i>
2003	Institute of Physics Workshop on Fundamental Physics in Space, London	<i>LISA</i>
2003	2 nd EGO/SIGRAV School on Gravitational Waves	<i>LISA</i>
2003	International School and Conference on Gravitational Wave Sources, ICTP, Trieste	<i>LISA</i>
2003	Max Planck Institute for Gravitational Physics,(Albert Einstein Institute), International Symposium on Gravitational Waves, Golm (Berlin)	<i>Low frequency and very high frequency gravitational wave astronomy</i>
2003	SpaceParts2003 Washington DC	<i>LISA and LISA PF</i>
2004	COSPAR2004, Parigi	<i>LISA Pathfinder</i>
2004	APEC meeting on GW, London	<i>LISA</i>
2004	Frontier of Science, Rome	<i>LISA</i>
2004	Cosmic Vision workshop 2015-2025. Paris September 2004	<i>Space-time exploration beyond our standard models. (Concluding remarks on Fundamental Physics)</i>
2005	38 ESLAB Symposium, ESTEC	<i>Pioneering Gravitational Wave Astronomy with LISA</i>
2005	6 th International Amaldi Conference on Gravitational Waves, Okinawa, Japan	<i>LISA Pathfinder, LISA and Beyond (Plenary Lecture)</i>
2006	4 th EGO/SIGRAV School on Gravitational Waves	<i>Space-borne detectors</i>
2006	6-th International LISA symposium, Goddard Flight Space Center	<i>Achieving the mid-low end band performance with LISA (Plenary Lecture)</i>
2006	ESA International Workshop on Fundamental Physics, Florence	<i>LISA</i>
2006	Royal Astronomical Society Special Symposium, London	<i>LISA Pathfinder</i>
2006	CHIPP Workshop on Space Time and Gravitation, Lausanne	<i>LISA</i>
2007	Rencontres de Moriond 2007 Gravitational Waves and Experimental Gravity	<i>LISA and LISA Pathfinder</i>
2007	From Quantum to Cosmos2, Bremen	<i>LISA Pathfinder</i>
2007	7 th Edoardo Amaldi Conference on Gravitational Wave, Sidney	<i>LISA Pathfinder</i>
2007	ESMATS 2007, Liverpool	<i>LISA and LISA Pathfinder (Keynote lecture)</i>

2007	10th ICATPP Conference on Astroparticle, Particle, Space Physics, Detectors and Medical Physics Applications , Como.	<i>LISA Pathfinder, the science case</i>
2008	37th COSPAR Scientific Assembly Montreal, Canada , July 2008	<i>The Spacecraft as a Precision Instrument (COSPAR 50th Anniversary Lecture)</i>
2008	7-th LISA Symposium Barcelona	<i>LISA Pathfinder: the experiment and the route to LISA (Plenary Lecture)</i>
2008	“The Nature of Gravity” ISSI Symposium, Bern, Switzerlan	<i>Space-time metrology for LISA</i>
2008	1 st International LISA-DECIGO workshop. Tokyo	<i>LISA Pathfinder</i>
2010	Workshop on LISA Massive-Black hole in the cosmic landascape . Zürich	<i>LISA Pathfinder</i>
2010	14 th Gravitational Wave Data Analysis Workshop, Rome	<i>Space-borne gravitational wave detectors. (Keynote lecture)</i>
2010	8 th International LISA Symposium Stanford Ca	<i>The LISA Pathfinder experiment (Plenary Lecture)</i>
2010	19 International Conference on General Relativity (GR 19) Mexico City	<i>LISA Pathfinder Mission and Experiment</i>
2010	25th Texas Symposium on Relativistic Astrophysics, Heidelberg	<i>LISA</i>
2011	Bridging Electromagnetic Astrophysics and Cosmology with Gravitational Waves Milano, 28-30 March	<i>LISA Pathfinder: LISA is on is way (presented by O. Jennrich due to illness)</i>
2011	NASA Workshop on Gravitational Wave Mission Concepts (Lithicum Heights, MD Dec 20-23)	<i>NGO (Delivered by teleconference)</i>
2012	Le Récontres de Blois (Blois France) June 1st	<i>Gravitational Waves present and near future</i>
2012	9 th International LISA Symposium Paris	<i>The LISA Patfinder Experiment (Opening Lecture)</i>
2012	Quantum To Cosmos 5, Cologne, Germany	<i>LISA, eLISA & LISA Pathfinder Gravitational Wave Astronomy The LISA Pathfinder Mission</i>
2013	13 th Meeting of the High Energy Astrophysics Division of the American Astronomical Society, Monterey, Ca. USA	
2013	The 2013 European Physical Society Conference on High Energy Physics (EPSHEP) Stockholm, Sweden July 2013	<i>LISA Pathfinder: Europe paving the way to space-based gravitational wave astronomy</i>
2013	10th Edoardo Amaldi meeting on Gravitational waves Warsaw, July 2013	<i>Space-based Gravitational Wave Observatories (Plenary Lecture)</i>

2013	Quantum To Cosmos 6, Nice, France September 2013	<i>LISA Pathfinder: Europe paving the way to space- based gravitational wave astronomy</i>
2015	The Next Detectors for Gravitational Wave Astronomy KITPC, Beijing April 9th	<i>Spaceborne GW astronomy, (e)LISA, and LISA Pathfinder (Keynote Lecture)</i>
2015	14 Marcel Grossman Conference Rome July 2015	<i>LISA Pathfinder and ESA's Gravitational Wave Observatory (Plenary Lecture)</i>

12 List of publications

12.1 ISI-database publications and publications before 1980 on refereed journals

- [1] M. Cerdonio, F Mogno, B. Pispisa, G. L. Romani, and S. Vitale. Magnetic properties of some iron(iii) binuclear complexes in aqueous solution. *Inorganic Chemistry*, 16:400–404, 1977.
- [2] M. Cerdonio, A. Congiu-Castellano, F. Mogno, B. Pispisa, G.L. Romani, and S. Vitale. Magnetic properties of oxyhemoglobin. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 74:398– 400, 1977. A. Desideri, M. Cerdonio, F. Mogno, S. Vitale, L. Calabrese, D. Cocco, and G. Rotilio. A magnetic susceptibility study of cu(ii)-co(ii) superoxide dismutase. *Febs Letters* 89, 89:83–85, 1978.
- [3] M. Cerdonio, A. Congiu-Castellano, L. Calabrese, S. Morante, B. Pispisa, and S. Vitale. Room temperature magnetic properties of oxy- and carbonmonoxyhemoglobin. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 75:4916–4919, 1978.
- [4] M Cerdonio, S Morante, S Vitale, E E Diiorio, K H Winterhalter, G M Giacometti, And M Brunori. Magnetic equivalence of the hemes in hemoglobin zurich. *JOURNAL OF BIOLOGICAL CHEMISTRY*, 255(13):6166– 6167, 1980.
- [5] M Cerdonio, S Morante, S Vitale, A Deyoung, and Rw Noble. Variability of the magnetic-moment of carbon-monoxide hemoglobin from carp. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA-BIOLOGICAL SCIENCES*, 77(3):1462–1465, 1980.
- [6] M Cerdonio, S Morante, and S Vitale. Low-lying paramagnetic states in oxyhemoglobins and carbonmonoxy-hemoglobins. *ISRAEL JOURNAL OF CHEMISTRY*, 21(1):76–80, 1981.
- [7] M Cerdonio and S Vitale. Pulsar restlessness as induced by an external source. *LETTERE AL NUOVO CIMENTO*, 32(10):302–306, 1981.
- [8] C Dalvit, M Cerdonio, A Fontana, G Mariotto, S Vitale, A Deyoung, and Rw Noble. Resonance raman studies of the quaternary structuralchange in carp deoxy hemoglobin. *FEBS LETTERS*, 140(2):303–306, 1982.
- [9] M Cerdonio and S Vitale. Pulsars timing noise and external disturbances:gravitational-waves?. *Nuovo Cimento B*, 67(2):185–201, 1982.
- [10] S Vitale, S Morante, and M Cerdonio. Superconducting susceptometer for high-accuracy routine operation. *REVIEW OF SCIENTIFIC INSTRUMENTS*, 53(8):1123–1128, 1982.
- [11] M Cerdonio, S Morante, S Vitale, C Dalvit, Im Russu, C Ho, A Deyoung, and Rw Noble. Magnetic and spectral properties of carp carbonmonoxyhemoglobin - competitive effects of chloride-ions and inositol hexakisphosphate. *EUROPEAN JOURNAL OF BIOCHEMISTRY*, 132(3):461–467, 1983.

- [12] R W Noble, A Deyoung, E Diiorio, K H Winterhalter, M Cerdonio, S Morante, and S Vitale. Quaternary structure and spin equilibria in ferric hemoglobins a room-temperature study. *EUROPEAN JOURNAL OF BIOCHEMISTRY*, 133(2):475–478, 1983.
- [13] A Deyoung, M Cerdonio, S Vitale, and R W Noble. Spin state and quaternary structure of carp hemoglobin. *FEDERATION PROCEEDINGS*, 42(7):2031, 1983.
- [14] M Cerdonio and S Vitale. Superfluid he-4 analog of the rf superconducting quantum interference device and the detection of inertial and gravitational-fields. *PHYSICAL REVIEW B*, 29(1):481–483, 1984.
- [15] M Cerdonio, S Morante, D Torresani, S Vitale, A Deyoung, and R W Noble. Reexamination of the evidence for paramagnetism in oxy- monoxyhemoglobins and carbonmonoxyhemoglobins. *PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA*, 82(1):102–103, 1985.
- [16] M Cerdonio, M Bonaldi, P Falferi, G A Prodi, and S Vitale. A gyromagnetic electron gyroscope. *JAPANESE JOURNAL OF APPLIED PHYSICS PART 1*, 26(2, 26- 3):1669–1670, 1987.
- [17] R W Noble, A Deyoung, S Vitale, S Morante, and M Cerdonio. Studies on the linkage between spin equilibria and protein-structure in carp ferric hemoglobin. *EUROPEAN JOURNAL OF BIOCHEMISTRY*, 168(3):563–567, NOV 2 1987.
- [18] M Cerdonio, G A Prodi, and S Vitale. Dragging of inertial frames by the rotating earth - proposal and feasibility for a ground-based detection. *GENERAL RELATIVITY AND GRAVITATION*, 20(1):83–87, JAN 1988.
- [19] S Vitale, G A Prodi, and M Cerdonio. Thermal magnetic noise in rf squids coupled to ferromagnetic cores. *JOURNAL OF APPLIED PHYSICS*, 65(5):2130–2136, MAR 1 1989.
- [20] S Vitale, M Bonaldi, P Falferi, G A Prodi, and M Cerdonio. Magnetization by rotation and gyromagnetic gyroscopes. *PHYSICAL REVIEW B*, 39(16, B):11993–12002, JUN 1 1989.
- [21] R W Noble, A Deyoung, S Vitale, M Cerdonio, and E E Diiorio. Spin equilibria in human methemoglobin - effects of bezafibrate and inositol hexaphosphate as measured by susceptometry and visible spectroscopy. *BIOCHEMISTRY*, 28(12):5288–5292, JUN 13 1989.
- [22] R Barbieri, M Cerdonio, G Fiorentini, and S Vitale. Axion to magnon conversion - a scheme for the detection of galactic axions. *PHYSICS LETTERS B*, 226(3-4):357–360, AUG 10 1989.
- [23] M Cerdonio, S Morante, S Vitale, A Deyoung, and R W Noble. The use of a superconducting magnetometer to measure spin equilibria in hemoglobin. *JOURNAL OF MOLECULAR LIQUIDS*, 42:167–174, OCT 1989.
- [24] G A Prodi, S Vitale, M Cerdonio, and P Falferi. Thermal magnetization noise as a function of frequency in amorphous ferromagnets. *JOURNAL OF APPLIED PHYSICS*, 66(12):5984–5987, DEC 15 1989.
- [25] G A Prodi, S Vitale, M Cerdonio, and P Falferi. Magnetization thermal noise in soft ferromagnets at liquid he temperatures. *JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS*, 83(1-3):409–410, JAN 1990.
- [26] G Jung, J Konopka, and S Vitale. Synchronization of radiating intrinsic high- tc josephson-junctions. *PHYSICA B*, 165(1):105–106, AUG 1990.
- [27] M Bonaldi, M Cerdonio, and S Vitale. Progress towards a superfluid he-4 analog of the superconducting rf-squid. *PHYSICA B*, 165(1):765–766, AUG 1990.
- [28] G Jung, M Bonaldi, J Konopka, and S Vitale. Current enhanced 2- level fluctuator noise in high-tc thin-films. *PHYSICA B*, 165(2):1375–1376, AUG 1990.
- [29] M Cerdonio, P Falferi, G Durin, A Maraner, G A Prodi, R Tommasini, and S Vitale. Magnetic viscosity in rf-squids coupled to ferromagnetic cores. *PHYSICA B-CONDENSED MATTER*, 165(1):65–66, AUG 1990.
- [30] G Jung, J Konopka, and S Vitale. Spectral properties of rf emission from high tc-films. *JOURNAL OF APPLIED PHYSICS*, 68(6):3029–3031, SEP 15 1990.
- [31] M Bonaldi, S Vitale, and M Cerdonio. Rotationally induced dissipation in superfluid-helium. *PHYSICAL REVIEW B*, 42(16, A):9865–9874, DEC 1 1990.

- [32] G Jung, M Bonaldi, S Vitale, and J Konopka. On the origin of low- frequency noise in htes thin-films. *PHYSICA C*, 180(1-4):276–279, SEP 1991.
- [33] G Durin, M Bonaldi, M Cerdonio, R Tommasini, and S Vitale. Magnetic viscosity of co-based amorphous-alloys between 0.02-k and 4.2-k. *JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS*, 101(1-3):89–91, OCT 1991.
- [34] M Cerdonio, P Falferi, R Macchietto, G A Prodi, and S Vitale. Low-frequency behavior of soft ferromagnets at liquid-helium temperature. *JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS*, 101(1-3):92–94, OCT 1991.
- [35] G Jung, S Vitale, J Konopka, and M Bonaldi. Random telegraph signals and low-frequency voltage noise in y-ba-cu-o thin-films. *JOURNAL OF APPLIED PHYSICS*, 70(10, 1):5440–5449, NOV 15 1991.
- [36] R E Packard and S Vitale. Some phenomenological theoretical aspects of intrinsic superfluid critical velocities. *PHYSICAL REVIEW B*, 45(5):2512–2515, FEB 1 1992.
- [37] S Vitale, M Cerdonio, and M Bonaldi. Differences and similarities between the squid and a possible superfluid-helium analog. *PHYSICA B*, 178(1-4):347–351, MAY 1992.
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12.2 Roadmaps and committee reports

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