Personal information

Surname(s) / First name(s)	**Ruggiero Matteo Luca**
Address(es)	ITES “Russell-Moro“, Corso Molise 59, 10151 Torino’, home page www.matteoluca.it
Telephone(s)	+393491955857
Email(s)	matteoluca.ruggiero@gmail.com
Nationality(-ies)	Italian
Date of birth	August 22, 1975
Gender	Male

Work Experience

September 2016-to-date	Physics Teacher
@	ITES “Russell-Moro”, Torino
2011-2012, 2015-to-date	Contract Professor, “Complementi di Matematica e Fondamenti di Fisica” (Complements of Mathematics and Foundations of Physics)
@	Politecnico di Torino
2016-to-date	Contract Professor, “Physics 1 - Laboratory”
@	Politecnico di Torino
2010-September 2016	Contract Professor, “Fisica Generale I” (Basic Mechanics and Thermodynamics)
@	Politecnico di Torino
September 2014- August 2015	Post-Doc
@	Politecnico di Torino
2011-2015	Contract Professor, “Laboratorio di Preparazione di Esperienze Didattiche I” (Preparation of Didactic Experiments)
@	Università degli Studi di Torino
2013-2014	Contract Professor, “Preparazione di Esperienze Didattiche II” (Preparation of Didactic Experiments)
@	Università degli Studi di Torino
2011-2012	Contract Professor, “Complementi di Matematica e Fondamenti di Fisica” (Complements of Mathematics and Foundations of Physics)
@	Politecnico di Torino
2009-2011	Contract Professor, “Geometria”, “Matematica II” (Linear Algebra and Differential Equations)
@	Politecnico di Torino
November 2009-October 2011	Post-Doc
@	Politecnico di Torino
2009	Assistant Professor
@	Università Telematica Internazionale Uninettuno - UTIU, Roma
2002-to date	Research Associate

@	INFN
January 2004-December 2008	Post-DOC
@	Department of Physics, Politecnico di Torino

Education

2001-2003	Ph.D. in Physics
@	Politecnico di Torino
Ph.D. Thesis Title	Rotation Effects in Relativity
Supervisor	Prof. Angelo Tartaglia, Politecnico di Torino,
1994-2000	"Diploma di Laurea" in Physics, specialization in Astrophysics and Space Physics
@	Università degli Studi di Pisa
Theis Title	Teoria di Einstein-Cartan come teoria dell'equilibrio di un continuo elastico quadri-dimensionale (Einstein-Cartan Theory as a theory of the equilibrium of an elastic continuum)
Supervisor	Prof. Angelo Tartaglia, Politecnico di Torino
Supervisor	Prof. Elio Fabri, Università degli Studi di Pisa

Personal skills and competences

Mother tongue(s) **Italian**

Other Languages

Self-assessment *European level*(*)	Understanding		Speaking		Writing
	Listening	Reading	Spoken interaction	Spoken production	
English	C2 Proficient user	C2 Proficient user	C1 Proficient user	C1 Proficient user	C2 Proficient user
French	B1 Independent user	B2 Independent user	B2 Independent user	B2 Independent user	A2 Basic user

(*) *Common European Framework of Reference (CEF) level*

Social skills and competences

I can work in a team, since I have been a member of the Relativity and Gravitation Group at Politecnico di Torino for 10 years and, in this period, I have gained the skill of collaborating with colleagues, all over the world. I can simplify complex concepts, since I have been teaching physics and maths for more than 10 years, dealing with students' learning difficulties. I can find a balance between different viewpoints, since I can listen to and elaborate my interlocutors' opinions.

Organisational skills and competences

I can organize, manage and coordinate the work of a research team, since I gained experience during and after my Ph.D.
I can organize events, since I have been member of the organizing committee of workshops, conferences, exhibitions. I can write funding requests, since I have taken part in the making of research projects funding requests.

Technical skills and competences

I am a theoretical physicist, and I am interested in relativistic theories of gravitation and their experimental or observational tests. I am also interested in the development and usage of new learning technologies (such as e-learning). I can use software tools that help me in my research work, and also in my teaching activity.

Computer skills and competences

Operating Systems: Windows, OS X, Linux

Basic Productive Tools in Windows, OS X, Linux

Symbolic computation software MAPLE

Document preparation language LaTeX

Learning Management System Dokeos, Moodle

Content Management Systems Joomla, Mediawiki, Wordpress, Drupal

Making and administration of the web site Relgrav 2.0 (www.polito.it/relgrav)

Making and administration of the personal page (www.matteoluca.it)

Making and administration of the web site Time Machine Factory (timemachine.polito.it/home

Making and administration of the web site Science and the Future (scienceandthefuture.polito.it/home

Making and administration of the web site GINGER (https://web2.infn.it/GINGER/)

Additional Information

Outline of my Scientific Interests

My main area of interest pertains to the study of rotation effects in Relativity, in different contexts, such as gravito-magnetic effects in General Relativity, rotating observers in Special Relativity, gravitational theories with torsion (Einstein-Cartan Theory). Moreover, I studied higher order theories of gravity ($f(R)$ theories), which became interesting for their cosmological implications. Eventually, I am interested in relativistic positioning systems. As for the gravito-magnetic effects, I am interested in studying Solar System experiments or astrophysical situations where these effects can be observed; I studied the gravito-magnetic influence on the propagation of signals both in the weak field of the Sun and in binary systems containing a pulsar. In these systems, since often the companion of the pulsar is another compact object, post-Newtonian effect may become relevant. In particular, I evaluated the gravito-magnetic Shapiro time-delay and the gravito-magnetic Faraday rotation with emphasis on the binary pulsar system PSR J0737-3039. I studied the role of rotating observers, in both flat and curved space-time, in order to give an operational definition of the fundamental concepts of time and space, thus helping in fixing some previous ambiguities. In this context, together with Prof. G. Rizzi, I edited a book, Relativity in Rotating Frames, published by Kluwer Academic Publishers (2004). Furthermore, on the basis of the 3+1 splitting that allows to formally introducing the gravito-electromagnetic fields, I studied the analogy between the Sagnac effect and the Aharonov-Bohm effect. Recently, I started studying the possibility of detecting post-Newtonian effects on an Earth-bound laboratory by means of ring lasers. During my undergraduate work, I studied and compared the Einstein-Cartan theory and the classical theory of defects in an elastic medium: on the basis of the common geometrical foundations of the two theories, an analogy can be built which allows to say that a space-time with curvature and torsion can be considered as an equilibrium state of a four-dimensional continuum filled with defects. I am also interested in higher theories of gravity, the so called $f(R)$ theories, where the gravitational Lagrangian depends on an arbitrary analytic function of the scalar curvature and on Horava-Lifshitz gravity: in particular I studied their Newtonian and Post-Newtonian limit and, more in general, their compatibility with Solar System tests of gravity. I am involved in the study of a fully relativistic positioning system, based on the introduction of the so-called emission-coordinates (or light coordinates), which can be used for space navigation around the Earth or in the Solar System (using pulsars' signals).

Outline of Teaching Experience

As for the teaching activities, since 2001 I have worked as Assistant Instructor and Tutor for General Physics Courses at Politecnico di Torino and Uninettuno University. Since 2009 I have been Contract Professor of Linear Algebra at Politecnico di Torino. Since 2010 I have been Contract Professor of Physics at Politecnico di Torino.In 2011-2012 I have been Contract Professor of "Complements of Mathematics and Foundations of Physics" at Politecnico di Torino. Since 2011 I have been Contract Pofessor of "Laboratory of Preparation of Didactic Experiments" at Università degli Studi di Torino. Furthermore, I developed part of the contents of the web-site "Fisica in Linea" (see http://areeweb.polito.it/ricerca/FIL/) , where hypertexts and multimedia are used for Basic Physics teaching; I wrote an on-line self-evaluation test for the "Test on Line" (TOL) (see http://130.192.45.93/tol) software, developed at Politecnico, and I analyzed the data of 5 years of experimentation of the use of the TOL system for the Basic Physics Exams at Politecnico di Torino. For the multimedial system for guidance and self-valuation of the Politecnico di Torino (see http://elearning.polito.it/), I wrote tests on basic physics, together with a short introductory course. Furthermore, together with Dr. Pietro Mandracci, I collaborate on the making of Prof. Guido Rizzi's "Introduzione alla Fisica Classica", a Physics textbook for undergraduate students. Furthermore, I published an exercises book on basic Physics "apire e risolvere. Esercizi di Fisica Generale Meccanica e Termodinamica".

Teaching Experience

- 2001-to 2009 “Fisica Sperimentale II” (Basic Electromagnetism and Optics), Politecnico di Torino, Assistant Instructor and Tutor with Prof. A. Tartaglia, Prof. M. Trigiante, Prof. G. Ummarino
- 2003-2004 “Fisica Generale I” (Basic Mechanics and Thermodynamics), Politecnico di Torino, Assistant Instructor and Tutor with Prof. G. Rizzi
- 2006-2009 “Fisica Generale I e II” (Basic Mechanics and Thermodynamics, Electromagnetism and Optics), Uninettuno University, Tutor with Prof. A. Tartaglia
- 2009-2012 “Geometria”, (Geometry and Linear Algebra), Politecnico di Torino, Contract Professor
- 2009-2012 “Matematica II” (Geometry and Linear Algebra), Politecnico di Torino, Contract Professor
- 2009-2012 “Fisica II” (Basic Electromagnetism and Optics), Politecnico di Torino, Tutor
- 2011-2012 “Complementi di Matematica e Fondamenti di Fisica” (Complements of Mathematics and Foundations of Physics), Politecnico di Torino, Contract Professor
- 2011-to date “Laboratorio di Preparazione di Esperienze Didattiche I” (Preparation of Didactic Experiments), Università degli Studi di Torino, Contract Professor
- 2013-2014 “Preparazione di Esperienze Didattiche II” (Preparation of Didactic Experiments), Università degli Studi di Torino, Contract Professor
- 2010-2016 “Fisica I” (Basic Mechanics and Thermodynamics), Politecnico di Torino, Contract Professor
- 2016-2017 “Complementi di Matematica e Fondamenti di Fisica” (Complements of Mathematics and Foundations of Physics) and “Physics 1 - Laboratory”, Politecnico di Torino, Contract Professor

Schools, Workshops, Conferences, Talks

Schools

- Scuola Nazionale di Fisica Teorica di Parma, Settembre 2000
- Virgo-SIGRAV School on Gravitational Waves, Pisa, May 2002
- SIGRAV School Villa Mondragone in Gravitational Physics and Cosmology, Frascati, September 2002
- SIGRAV Graduate School In Contemporary Relativity And Gravitational Physics, Villa Olmo, Como, May 2007

Workshops and Conferences Attendance

- GRG 16, International Conference on General Relativity and Gravitation, July 2001, Durban, South Africa
- 2001 A Relativistic Space Time Odyssey, 25th John Hopkins Workshop, September 2001, Firenze, Italy
- Futuristic Space Technologies, First International ASI Workshop, May 2002, Trieste, Italy
- Advances in General Relativity and Cosmology, International Conference in Memory of A. Lichnerowicz, June 2002, Isola d'Elba, Italy
- Black Holes, Gravitational Waves and Cosmology, X ICRA Network Workshop, Roma-Pescara, July 2002
- 15th SIGRAV Conference on General Relativity and Gravitational Physics, Monte Porzio Catone (Roma, Italy), September 2002
- Meeting Annuale, Iniziativa Specifica INFN NA12, Vietri sul Mare (Sa), Ottobre 2002
- Dynamics and Thermodynamics of Black Holes and Naked Singularities, Dipartimento di Matematica, Politecnico di Milano, May 2004
- Analysis, Manifolds and Geometric Structures in Physics, International Conference in Honour of Y. Choquet-Bruhat, June 2004, Isola d'Elba, Italy
- GR17, International Conference on General Relativity and Gravitation, July 2004, Dublin, Ireland
- 16th SIGRAV Conference on General Relativity and Gravitational Physics, Vietri sul Mare (Salerno, Italy), September 2004
- Meeting Annuale, Iniziativa Specifica INFN NA12, S. Margherita Ligure (Genova, Italy), Ottobre 2004
- Spacetime in Action: one hundred years of relativity Pavia (Italy), March 29 - April 2, 2005
- Didamatica 2005, Convegno promosso dall'Associazione Italiana per l'Informatica ed il Calcolo Automatico, Potenza 12-14 Maggio 2005 (2005)
- Meeting Annuale, Iniziativa Specifica INFN NA12, Torino (Italy), 27-28 Ottobre 2005
- Meeting Annuale, Iniziativa Specifica INFN NA12, Napoli (Italy), 26-27 Ottbore 2006
- Meeting Annuale, Iniziativa Specifica INFN NA12, Salerno (Italy), 2-3 Ottbore 2008
- Meeting Annuale, Iniziativa Specifica INFN NA12, Torino (Italy), 28-29 Settembre 2009
- ESA Workshop Relativistic Positioning systems: from a paradigm shift to practical applications, ESTEC, Noordwijk (The Netherlands), April 26 2010
- 19th SIGRAV Conference on General Relativity and Gravitational Physics, Pisa (Italy), September 2010
- Meeting Annuale, Iniziativa Specifica INFN NA12, Napoli (Italy), 25 Ottbore 2010
- GREAT-ES Workshop, Porto (Portugal) 6-9 June 2011
- Meeting Collaborazione G-GranSasso, Laboratori Nazionali di Legnaro, INFN - Padova (Italy), 19 December 2011
- The Time Machine Factory, Torino, October 2012
- 21nd SIGRAV Conference on General Relativity and Gravitational Physics, Alessandria (Italy), September 2014
- The Time Machine Factory, Torino, October 2015

Talks

- Rotation Effects and The Gravito-Magnetic Approach @ 16th SIGRAV Conference on General Relativity and Gravitational Physics, Vietri sul Mare (Salerno, Italy), September 2004
- Gravitomagnetic Aharonov-Bohm Effect, Some Rotation Effects Revised @ Analysis, Manifolds and Geometric Structures in Physics, International Conference in Honour of Y. Choquet-Bruhat, June 2004, Isola d'Elba, Italy
- Post-Newtonian Parameters from Alternative Theories of Gravity @ Meeting Annuale, Iniziativa Specifica INFN NA12, Torino (Italy), 27-28 Ottobre 2005
- Solar System planetary orbital motions and f(R) Theories of Gravity @ Meeting Annuale, Iniziativa Specifica INFN NA12, Napoli (Italy), 26-27 Ottobre 2006
- Newtonian and Post-Newtonian Limits of f(R) Theories of Gravity and Physical Constraints @ Meeting Annuale, Iniziativa Specifica INFN NA12, Salerno (Italy), 2-3 Ottobre 2008
- A Laser Gyroscope System to Detect Gravitomagnetic Effects on Earth @ 19th SIGRAV Conference on General Relativity and Gravitational Physics, Pisa (Italy), September 2010
- Pulsars as celestial beacons to detect the motion of the Earth @ Meeting Annuale, Iniziativa Specifica INFN NA12, Napoli (Italy), 25 Ottobre 2010
- Using Ring Laser Systems to Measure Gravitomagnetic Effects on Earth @ GREAT-ES Workshop, Porto (Portugal) 6-9 June 2011
- Theory and Practice of Gravitomagnetism @ Laboratori Nazionali di Legnaro, INFN - Padova (Italy), 29 November 2011
- Test di Fisica Fondamentale con G-GranSasso @ Meeting Collaborazione G-GranSasso, Laboratori Nazionali di Legnaro, INFN - Padova (Italy), 19 December 2011
- Ginger and Tests of General Relativity @ 21nd SIGRAV Conference on General Relativity and Gravitational Physics, Alessandria (Italy), September 2014
- Navigating by the Stars, invited talk @ ACGRG99, Perth, Western Australia, 27-30 November 2017

Other Activities

Professional Activity

- Editor of Journal of High Energy Physics, Gravitation and Cosmology
- Referee of The Astrophysical Journal
- Referee of Classical and Quantum Gravity
- Referee of JCAP
- Referee of Foundations of Physics
- Referee of New Astronomy
- Referee of General Relativity and Gravitation
- Referee of the International Journal of Modern Physics D
- Referee of Mathematical Reviews
- Referee of the Canadian Journal of Physics
- Referee of Astronomy and Space Science
- Referee of International Journal of Theoretical Physics
- Referee of Comptes Rendus de l'Académie des Sciences
- Referee of Europhysics Letters
- Referee of Naturwissenschaften
- Referee of Zeitschrift für Naturforschung A
- Referee of European Physics Journal C
- Referee of Physica Scripta
- Referee of Physics Essays
- Referee of European Physical Journal-Plus
- Referee of Int. J. of Bifurcation and Chaos
- Referee of Journal of Mathematical Physics
- Referee of Journal of Earth Science Research

Organization of Conferences, Workshops and Exhibitions

- Organization of Meeting Annuale dell'Iniziativa Specifica INFN NA12, Torino (Italy), October 2005
- Organization of the Exhibition "La relatività nel quotidiano: dal GPS al sistema GALILEO", (Relativity in everyday life: from GPS to GALILEO system) Politecnico di Torino, October 2005
- Member of the LOC "17th SIGRAV Conference on General Relativity and Gravitational Physics", Torino, September 2006
- Organization of Meeting Meeting Annuale dell'Iniziativa Specifica INFN NA12, Torino (Italy), September 2009
- Organization of the Exhibition "Navigare con le Stelle" (Navigating with the Stars) (, Torino, September 2009
- Organization of the Conference "The Time Machine Factory", Co-Chair, Member of the Scientific Organizing Committee and of the Local Organizing Committee
- Organization of the Conference "Science and the Future", Member of the Local Organizing Committee

Publications

Papers

Angelo Tartaglia, David Lucchesi, Matteo Luca Ruggiero, and Pavol Valko. How to use the Sun-Earth Lagrange points for fundamental physics and navigation. *Gen. Rel. Grav.*, 50:9, 2018

Emmanuele Battista, Angelo Tartaglia, Giampiero Esposito, David Lucchesi, Matteo Luca Ruggiero, Pavol Valko, Simone Dell' Agnello, Luciano Di Fiore, Jules Simo, and Aniello Grado. Quantum time delay in the gravitational field of a rotating mass. *Class. Quant. Grav.*, 34(16):165008, 2017

Angelo Tartaglia, Angela Di Virgilio, Jacopo Belfi, Nicolo' Beverini, and Matteo Luca Ruggiero. Testing general relativity by means of ringlasers. *Eur. Phys. J. Plus*, 132(2):73, 2017

Gabriel Farrugia, Jackson Levi Said, and Matteo Luca Ruggiero. Solar System tests in f(T) gravity. *Phys. Rev.*, D93(10):104034, 2016

Lorenzo Iorio, Matteo Luca Ruggiero, Ninfa Radicella, and Emmanuel N. Saridakis. Constraining the Schwarzschild-de Sitter Solution in Models of Modified Gravity. *Phys. Dark Univ.*, 13:111–120, 2016

Matteo Luca Ruggiero. Light bending in $f(T)$ gravity. *Int. J. Mod. Phys.*, D25(06):1650073, 2016

Matteo Luca Ruggiero. Gravitomagnetic Field of Rotating Rings. *Astrophys. Space Sci.*, 361(4):140, 2016

Lorenzo Iorio, Ninfa Radicella, and Matteo Luca Ruggiero. Constraining f(T) gravity in the Solar System. *JCAP*, 1508(08):021, 2015

Matteo Luca Ruggiero. Sagnac Effect, Ring Lasers and Terrestrial Tests of Gravity. *Galaxies*, 2015:84–102, 2015

Matteo Luca Ruggiero and Ninfa Radicella. Weak-Field Spherically Symmetric Solutions in $f(T)$ gravity. *Phys. Rev.*, D91:104014, 2015

Matteo Luca Ruggiero. Gravito-electromagnetic Effects of Massive Rings. *Int. J. Mod. Phys.*, D24(08):1550060, 2015

Matteo Luca Ruggiero and Angelo Tartaglia. A Note on the Sagnac Effect for Matter Beams. *Eur. Phys. J. Plus*, 130(5):90, 2015

Angela Di Virgilio, Maria Allegrini, Alessandro Beghi, Jacopo Belfi, Nicolo Beverini, Filippo Bosi, Bachir Bouhadef, Massimo Calamai, Giorgio Carelli, Davide Cuccato, Enrico Maccioni, Antonello Ortolan, Giuseppe Passeggio, Alberto Porzio, Matteo Luca Ruggiero, Rosa Santagata, and Angelo Tartaglia. A ring lasers array for fundamental physics. *Comptes rendus - Physique*, 15:866–874, 2014

A. Tartaglia and M.L. Ruggiero. Sagnac effect and pure geometry. *American Journal of Physics*, 83:427–432, 2015

Matteo Luca Ruggiero and Angelo Tartaglia. A Note on the Sagnac Effect and Current Terrestrial Experiments. *Eur.Phys.J.Plus*, 129:126, 2014

M.L. RUGGIERO. Perturbations of Keplerian Orbits in Stationary Spherically Symmetric Spacetimes. *Int.J.Mod.Phys.*, D23:1450049, 2014

IORIO L, RUGGIERO M.L., and CORDA C. Novel considerations about the error budget of the lageos-based tests of frame-dragging with grace geopotential models. *ACTA ASTRONAUTICA*, 91:141–148, 2013

CARDONE V. F., CAPONE M., RADICELLA N., and RUGGIERO M.L. Spiral galaxies rotation curves in the Horava - Lifshitz gravity theory. *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*, 423:141–148, 2012

BOSI F., CELLA G, DI VIRGILIO A., ORTOLAN A., PORZIO A., SOLIMENO S., CERDONIO M., ZENDRI J. P., ALLEGRINI M., BELFI J., BEVERINI N., BOUHADEF B., CARELLI G., FERRANTE I., MACCIONI E., PASSAQUIETI R., STEFANI F., RUGGIERO M. L., TARTAGLIA A., SCHREIBER K. U., GEBAUER A., and WELLS J-P. R. Measuring Gravito-magnetic Effects by Multi Ring-Laser Gyroscope. *Phys. Rev.*, D84:122002, 2011

IORIO L. and RUGGIERO M.L. Horava-lifshitz gravity: tighter constraints for the kehagias-sfetsos solution from new solar system data. *INTERNATIONAL JOURNAL OF MODERN PHYSICS D*, 20:1025–1038, 2011

TARTAGLIA A., RUGGIERO M.L., and CAPOLONGO E. A relativistic navigation system for space. *ACTA FUTURA*, 4:33–40, 2011

IORIO L, RUGGIERO M.L., LICHTENEGGER H.I.M., and CORDA C. Phenomenology of the lense-thirring effect in the solar system. *ASTROPHYSICS AND SPACE SCIENCE*, 331:351–395, 2011

RUGGIERO M.L., CAPOLONGO E., and TARTAGLIA A. Pulsars as celestial beacons to detect the motion of the earth. *INTERNATIONAL JOURNAL OF MODERN PHYSICS D*, 20:1025–1038, 2011

TARTAGLIA A., RUGGIERO M.L., and CAPOLONGO E. A null frame for spacetime positioning by means of pulsating sources. *ADVANCES IN SPACE RESEARCH*, 47:645–653, 2011

IORIO L. and RUGGIERO M. Constraining the kehagias-sfetsos solution in the horava-lifshitz gravity with extrasolar planets. *THE OPEN ASTRONOMY JOURNAL*, 3:167–171, 2010

CAPONE M., CARDONE V.F., and RUGGIERO M.L. Accelerating cosmology in rastall's theory. *IL NUOVO CIMENTO B*, 125:1133–1142, 2010

IORIO L. and RUGGIERO M.L. Phenomenological constraints on the kehagias-sfetsos solution in the horava-lifshitz gravity from solar system orbital motions. *INTERNATIONAL JOURNAL OF MODERN PHYSICS A*, 25:5399–5408, 2010

CAPONE M and RUGGIERO M.L. Jumping from higher-order to scalar-tensor theories and the relations between their ppn parameters. *CLASSICAL AND QUANTUM GRAVITY*, 27:125006, 2010

RUGGIERO M.L. and IORIO L. Gravitomagnetic time-varying effects on the motion of a test particle. *GENERAL RELATIVITY AND GRAVITATION*, 42:2393–2402, 2010

CARDONE V.F, RADICELLA N, RUGGIERO M.L., and CAPONE M. The milky way rotation curve in horava - lifshitz theory. *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*, 406:1821–1829, 2010

RUGGIERO M.L. Gravito-magnetic gyroscope precession in palatini f(r) gravity. *PHYSICAL REVIEW D, PARTICLES, FIELDS, GRAVITATION, AND COSMOLOGY*, 79:084001–, 2009

IORIO L and RUGGIERO M.L. Gravitomagnetic effects in kerr-de sitter space-time. *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*, 2009:024, 2009

RUGGIERO M.L. Gravitational lensing and f(r) theories in the palatini approach. *GENERAL RELATIVITY AND GRAVITATION*, 41:1497–1509, 2009

IORIO LORENZO and RUGGIERO M.L. Solar system tests of some models of modified gravity proposed to explain galactic rotation curves without dark matter. *SCHOLARLY RESEARCH EXCHANGE*, 2008:968393, 2008

DONATO BINI, ANDREA GERALICO, RUGGIERO M.L., and ANGELO TARTAGLIA. Emission versus fermi coordinates: Applications to relativistic positioning systems. *CLASSICAL AND QUANTUM GRAVITY*, 25:205011, 2008

RUGGIERO M.L. and TARTAGLIA ANGELO. Mapping cartesian coordinates into emission coordinates: some toy models. *INTERNATIONAL JOURNAL OF MODERN PHYSICS D*, 17:311, 2008

IORIO L and RUGGIERO M.L. Constraining models of modified gravity with the double pulsar psr j0737-3039a/b system. *INTERNATIONAL JOURNAL OF MODERN PHYSICS A*, 22:5379, 2007

RUGGIERO M.L. and ALLEMANDI G. Constraining extended theories of gravity using solar system tests. *GENERAL RELATIVITY AND GRAVITATION*, 39:1381, 2007

RUGGIERO M.L. and IORIO L. Solar system planetary orbital motions and f(r) theories of gravity. *JOURNAL OF COSMOLOGY AND ASTROPARTICLE PHYSICS*, 01:010, 2007

RUGGIERO M.L. and A. TARTAGLIA. Gravitational faraday rotation in binary pulsar systems. *MONTHLY NOTICES OF THE ROYAL ASTRONOMICAL SOCIETY*, 315:847, 2007

RUGGIERO M.L., A. TARTAGLIA, and L. IORIO. Doppler effects from bending of light rays in curved space-times. *INTERNATIONAL JOURNAL OF MODERN PHYSICS D*, 15:1183, 2006

RUGGIERO M.L. and TARTAGLIA A. Post-keplerian parameter to test gravitomagnetic effects in binary pulsar systems. *PHYSICAL REVIEW D, PARTICLES, FIELDS, GRAVITATION, AND COSMOLOGY*, 72:084030–, 2005

TARTAGLIA A., NAGAR A, and RUGGIERO M.L. Time delay in binary systems. *PHYSICAL REVIEW D, PARTICLES, FIELDS, GRAVITATION, AND COSMOLOGY*, 71:1–7, 2005

G. ALLEMANDI, M. FRANCAVIGLIA, RUGGIERO M.L., and A. TARTAGLIA. Post-newtonian parameters from alternative theories of gravity. *GENERAL RELATIVITY AND GRAVITATION*, 37:1891, 2005

RUGGIERO M.L. The sagnac effect in curved space-times from an analogy with the aharonov-bohm effect. *GENERAL RELATIVITY AND GRAVITATION*, 37:1845, 2005

RUGGIERO M.L., A. TARTAGLIA, and E.TRESSO. Valutazione dell'apprendimento in fisica: cinque anni di sperimentazione al politecnico di torino. *GIORNALE DI FISICA DELLA SOCIETÀ ITALIANA DI FISICA*, 46:241, 2005

RUGGIERO M.L. Gravito-electromagnetic aharonov-bohm effect: some rotation effects revised. *IL NUOVO CIMENTO DELLA SOCIETÀ ITALIANA DI FISICA. B, GENERAL PHYSICS, RELATIVITY, ASTRONOMY AND MATHEMATICAL PHYSICS AND METHODS*, 119:893, 2004

G. RIZZI, RUGGIERO M.L., and A. SERAFINI. Synchronization gauges and the principles of special relativity. *FOUNDATIONS OF PHYSICS*, 34:1835, 2004. Invited paper in honour of F. Selleri

RUGGIERO M.L. and TARTAGLIA A. Gravito-electromagnetism versus electromagnetism. *EUROPEAN JOURNAL OF PHYSICS*, 25:203, 2004

RUGGIERO M.L. and TARTAGLIA A. Gravitomagnetic measurement of the angular momentum of celestial bodies. *GENERAL RELATIVITY AND GRAVITATION*, 36:293, 2004

RUGGIERO M.L. The relative space: Space measurements on a rotating platform. *EUROPEAN JOURNAL OF PHYSICS*, 24:563, 2003

RUGGIERO M.L. and TARTAGLIA A. Einstein-cartan theory as a theory of defects in space-time. *AMERICAN JOURNAL OF PHYSICS*, 71:1303, 2003

RUGGIERO M.L. and RIZZI G. A direct kinematical derivation of the relativistic sagnac effect for light or matter beams. *GENERAL RELATIVITY AND GRAVITATION*, 35:2129, 2003

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