Main Publications of IGNAZIO CIUFOLINI updated 2019

I. CIUFOLINI, A. Paolozzi, E.C. Pavlis, G. Sindoni, J. Ries, R. Matzner, R. Koenig, C. Paris and R. Penrose, An improved test of the general relativistic effect of frame-dragging using the LARES and LAGEOS satellites. **THE EUROPEAN PHYSICAL JOURNAL C, *79***, 872 (2019).

I. CIUFOLINI, Matzner, R., Paolozzi, A., Pavlis, E.C., Sindoni, G., Ries, J., Gurzadyan, V. and Koenig, R., Satellite laser-ranging as a probe of fundamental physics. **SCIENTIFIC REPORTS-NATURE*, 9,*** 1-10 (2019).

A. Paolozzi, Sindoni, G., Felli, F., Pilone, D., Brotzu, A., CIUFOLINI, I., E. C. Pavlis, and C. Paris. Studies on the materials of LARES 2 satellite. **JOURNAL OF GEODESY**, 1-10 (2019).

I. CIUFOLINI, Paolozzi, A., Pavlis, E. C., Matzner, R., König, R., Ries, J., Sindoni, G., Paris, C. and Gurzadyan, V. *Tests of General Relativity with the LARES Satellites* Relativistic Geodesy. *Fundamental Theories of Physics, Springer*, Cham, 2019, pp. 467-479

Pearlman, M., Arnold, D., Davis, M., Barlier, F., Biancale, R., Vasiliev, V., I. CIUFOLINI, Paolozzi, A., Pavlis, E. C., Sośnica, K. and Bloßfeld, M. Laser geodetic satellites: a high-accuracy scientific tool*,* **JOURNAL OF GEODESY**, Springer Verlag, 2019, pp. 1-14

König, R., I. CIUFOLINI, Measurement of Frame Dragging with Geodetic Satellites Based on Gravity Field Models from CHAMP, GRACE and Beyond, Relativistic Geodesy. *Fundamental Theories of Physics, Springer*, Cham, 2019, pp. 453-465

R. Koenig, S. Glaser, I. CIUFOLINI and A. Paolozzi, *Impacts of the LARES and LARES-2 satellite missions on the SLR terrestrial reference frame*, Proceedings of the IX HOTINE-MARUSSI SYMPOSIUM, in print, Rome, 18-22 June, 2018, (International Association of Geodesy Symposia, Springer 2019).

I. CIUFOLINI, Matzner, R. A., Feng, J. C., Paolozzi, A., Rubincam, D. P., Pavlis, E. C., Ries, J. C., Sindoni, G. and Paris, C. *A new laser-ranged satellite for General Relativity and space geodesy: IV. Thermal drag and the LARES 2 space experiment* **THE EUROPEAN PHYSICAL JOURNAL PLUS**, Springer Verlag, 2018, Vol. 133

Felli, F., Brotzu, A., Pilone, D., Paolozzi, A. and I. CIUFOLINI *Fracture behaviour of alloys for a new laser ranged satellite* **PROCEDIA STRUCTURAL INTEGRITY**, 2018, Vol. 9, pp. 295-302

Paolozzi, A., I. CIUFOLINI, Sindoni, G. and Paris, C. *The LARES 2 satellite: new challenges for design and ground test* **AEROTECNICA, MISSILI E SPAZIO**, 2018, Vol. 97, pp. 135-144

Paolozzi, A., Felli, F., Pilone, D., Brotzu, A., Paris, C. and I. CIUFOLINI *Development and analysis of a new alloy candidate for LARES 2 satellite* Proceedings of 69th International Astronautical Congress (IAC), Bremen, Germany, 1-5 October 2018 International Astronautical Federation - IAF, 2018

I. CIUFOLINI, Pavlis, E. C., Ries, J., Matzner, R., Koenig, R., Paolozzi, A., Sindoni, G., Gurzadyan, V., Penrose, R. and Paris, C. *Reply to "A comment on "A test of general relativity using the LARES and LAGEOS satellites and a GRACE Earth gravity model, by I. CIUFOLINI et al.""* **THE EUROPEAN PHYSICAL JOURNAL. C**, Springer New York LLC, 2018, Vol. 78

Gurzadyan, V. G., I. CIUFOLINI, Khachatryan, H. G., Mirzoyan, S., Paolozzi, A. and Sindoni, G. *On the Earth's tidal perturbations for the LARES satellite* **THE EUROPEAN PHYSICAL JOURNAL PLUS**, Springer Verlag, 2017, Vol. 132

I. CIUFOLINI, Antonio Paolozzi, Erricos C.Pavlis, Giampiero Sindoni, Rolf Koenig, John C.Ries, Richard Matzner, Vahe Gurzadyan, Roger Penrose, David Rubincam and Claudio Paris, A new laser-ranged satellite for General Relativity and space geodesy: I. An introduction to the LARES 2 space experiment, **THE EUROPEAN PHYSICAL JOURNAL *PLUS*** 132: 336 (2017).

I. CIUFOLINI, Erricos C. Pavlis, Giampiero Sindoni, John C. Ries, Antonio Paolozzi, Richard Matzner, Rolf Koenig and Claudio Paris, A new laser-ranged satellite for General Relativity and space geodesy: II. Monte Carlo simulations and covariance analyses of the LARES 2 experiment, **THE EUROPEAN PHYSICAL JOURNAL *PLUS* 132**: 337 (2017).

I. CIUFOLINI, Richard Matzner, Vahe Gurzadyan and Roger Penrose, A new laser-ranged satellite for General Relativity and Space Geodesy III. De Sitter effect and the LARES 2 space experiment, submitted to **THE EUROPEAN PHYSICAL JOURNAL C 77**:819 (2017).

I. CIUFOLINI, A. Paolozzi, G. Sindoni, C. Paris, Measurement of frame dragging of general relativity using LARES 2 satellite, in press on the proceedings of the XXIV International Conference of the Italian Association of Aeronautics and Astronautics (AIDAA), 18-22 September 2017, Palermo – Enna, Italy

C. Paris, G. Sindoni, A. Paolozzi, I. CIUFOLINI, F. Felli, The lares-lab thermovacuum facility with FBG sensor monitoring capability, in press on the proceedings of the XXIV International Conference of Italian Association of Aeronautics and Astronautics (AIDAA), 18-22 September 2017, Palermo – Enna, Italy

E.C. Pavlis, G. Sindoni, A. Paolozzi, I. CIUFOLINI, C. Paris, M. Kuzmicz-Cieslak, A. Gabrielli, "El Niño effects on Earth rotation parameters from LAGEOS and LARES orbital analysis", Proc. 17th IEEE International Conference on Environment and Electrical Engineering, June 6-9, 2017, Milan Italy

A.Paolozzi, C. Paris, G. Sindoni D. Arnold E. Pavlis I. CIUFOLINI L. Grunwaldt, R. Neubert, "Data efficiency for the satellite LARES", Proc. 17th IEEE International Conference on Environment and Electrical Engineering, June 6-9, 2017, Milan Italy

I. CIUFOLINI, Antonio Paolozzi, Erricos C. Pavlis, David Arnold, Rolf Koenig, John Ries, Giampiero Sindoni, Richard Matzner, Vahe Gurzadyan, Roger Penrose, David Rubincam, Reinhart Neubert, Claudio Paris, LARES 2 A new laser-ranged satellite for General Relativity and Space Geodesy, Abstract, JOURNAL OF GEODESY (2017).

V. G. Gurzadyan, CIUFOLINI I., A. Paolozzi, A.L. Kashin, H.G. Khachatryan, S. Mirzoyan and G. Sindoni, Satellites Testing General Relativity: Residuals Versus Perurbations, **INTERNATIONAL JOURNAL OF MODERN PHYSICS D**, **26**, 1741020 (2017).

G. Sindoni, CIUFOLINI I., F. Battie. A Monte Carlo analysis for collision risk assessment on VEGA launcher payloads and LARES satellite. **ARTIFICIAL SATELLITES**, Vol. 51, No. 1 – 2016 DOI: 10.1515/arsa-2016-0004

R. Matzner, P. Nguyen, J. Brooks, CIUFOLINI I., A. Paolozzi, E.C. Pavlis, R. Koenig, J. Ries, V. Gurzadyan, R. Penrose, G. Sindoni, C. Paris, H. Khachatryan, S. Mirzoyan, LARES satellite thermal forces and a test of general relativity, (2016) 3rd IEEE International Workshop on Metrology for Aerospace, MetroAeroSpace 2016 - Proceedings, art. no. 7573269, pp. 516-521 DOI: 10.1109/MetroAeroSpace.2016.7573269

CIUFOLINI I., A. Paolozzi, E.C. Pavlis, R. Koenig, J. Ries, V. Gurzadyan, R. Penrose, G. Sindoni, C. Paris, H. Khachatryan, S. Mirzoyan, A test of general relativity using the LARES and LAGEOS satellites and a GRACE Earth gravity model: Measurement of Earth's dragging of inertial frames, (**2016**) **EUROPEAN PHYSICAL JOURNAL C, 76** (3), DOI: 10.1140/epjc/s10052-016-3961-8

C. Pavlis, A. Paolozzi, CIUFOLINI I., C. Paris, G. Sindoni, M. Kuzmicz-Cieslak, A. Gabrielli. The impact of El Niño on Earth rotation from LAGEOS and LARES SLR observations. Proceedings of the 16 IEEE International Conference on Environment and Electrical Engineering, Florence, Italy, 7-10 June, 2016.

A. Paolozzi, C. Paris, E.C. Pavlis, G. Sindoni, CIUFOLINI I., Monitoring global climate change using SLR data from LARES and other geodetic satellites,(2016) Proceedings of SPIE - The International Society for Optical Engineering, 9803, art. no. 98034N, DOI: 10.1117/12.2222149

A. Paolozzi, E. C. Pavlis, C. Paris, G. Sindoni, CIUFOLINI I.. Earth Rotation: An example to teach rigid body motion and environmental monitoring. A fallout of the exploitation of LARES satellite data. In Proceedings of the 8th International Conference on Computer Supported Education (CSEDU 2016) - Volume 2, pages 339-346, 21-23 April 2016, Rome, Italy. ISBN: 978-989-758-179-3

G. Sindoni, E. C. Pavlis, C. Paris, A. Paolozzi, CIUFOLINI I.. Effects of climate change on Earth's parameters.An example of exabyte-sized system. In Proceedings of the 1st International Conference on Complex Information Systems (COMPLEXIS 2016), 22-24 April, 2016, Rome – Italy.

CIUFOLINI I., A. Paolozzi, E.C. Pavlis, R. Koenig, J. Ries, V. Gurzadyan, R. Matzner, G. Sindoni, C. Paris, H. Khachatryan, S. Mirzoyan, Recent Results from the LARES Mission on Testing General Relativity. Proceedings of the 67th International Astronautical Congress (IAC), Guadalajara, Mexico, 26 -30 September 2016. IAC-16-A2.1.4

A. Paolozzi, CIUFOLINI I., C. Paris, G. Sindoni, A Remotely Controllable Thermo-Vacuum Facility for Testing Small Payloads. In: Computer Supported Education, 7th International Conference, CSEDU 2015, Lisbon, Portugal, May 23-25, 2015, Revised Selected Papers. Editors: Zvacek, S., Restivo, M.T., Uhomoibhi, J., Helfert, M. (Eds.), 2016. ISBN 978-3-319-29585-5

I. CIUFOLINI, One Hundred Years Of General Relativity, Einstein's gravitational theory and its observational triumph, **IL NUOVO SAGGIATORE**, Vol 31, n.6 (2015).

I. CIUFOLINI, General Relativity and Dragging of Inertial Frames, in: "General Relativity: The most beautiful of Theories, Applications and trends after 100 years", **Centennial Jubilee Volume Of General Relativity**, ed. C. Rovelli (De Gruyter, Berlin) 2015, pp. 125-163.

A. Paolozzi, I. CIUFOLINI, C. Paris, G. Sindoni. A Remotely Controllable Thermo-vacuum Facility for Testing Small Payloads. **COMMUNICATIONS IN COMPUTER AND INFORMATION SCIENCE (CCIS)**. Springer-Verlag (2015).

Brotzu A., Felli F., Pilone D., Paolozzi A., CIUFOLINI I., (2015). Thoughness evaluation of LARES satellite tungsten alloy. **PROCEDIA ENGINEERING**, vol. 109, p. 517-524, ISSN: 1877-7058, doi: 10.1016/j.proeng.2015.06.259

I. CIUFOLINI, Antonio Paolozzi, Erricos C. Pavlis, Rolf Koenig, John Ries, Vahe Gurzadyan, Richard Matzner, Roger Penrose, Giampiero Sindoni and Claudio Paris. Preliminary orbital analysis of the LARES space experiment. **EUROPEAN PHYSICAL JOURNAL PLUS** (2015) 130: 133, Springer

A. Paolozzi, I. CIUFOLINI, C. Paris, G. Sindoni. LARES, a new satellite specifically designed for testing general relativity. **INTERNATIONAL JOURNAL OF AEROSPACE ENGINEERING**. Volume 2015 (2015), Article ID 341384, 9 pages. DOI: 10.1155/2015/341384

Paolozzi A., CIUFOLINI I., Gabrielli A., Paris C., Sindoni G. (2015). LARES mission: engineering aspects. **AEROTECNICA, MISSILI E SPAZIO**, vol. 94, p. 23-30, ISSN: 0365-7442

C. Canoci, I. CIUFOLINI, A. Coluccia, C. Paris, G. Ricci, G. Salvadori, G. Sindoni. On the statistics of the orbital residuals of the LAGEOS satellites. **MODERN PHYSICS LETTERS A**, Vol. 30, No. 19 (2015) 1550091 (14 pages), World Scientific Publishing Company. DOI: 10.1142/S0217732315500911

A. Paolozzi, I. CIUFOLINI, C. Paris, M. Parisse, G. Sindoni. Thermal deformation on a laser retro-reflector of LARES satellite: error analysis. 66th International Astronautical Congress - IAC 2015, 12 – 16 October, Jerusalem, Israel. IAC-15-C2.2.10

I. CIUFOLINI, A. Paolozzi, E. C. Pavlis, A. Gabrielli, C. Paris, G. Sindoni. Improvement in the measurement of frame-dragging with a future LARES 2 mission. 66th International Astronautical Congress - IAC 2015, 12 – 16 October, Jerusalem, Israel. IAC-15-A2.1.8

G. Sindoni, E. C. Pavlis, I. CIUFOLINI, C. Vendittozzi, A. Paolozzi. The contribution of LARES to global climate change studies with geodetic satellites. Proceedings of the ASME 2015 Conference on Smart Materials, Adaptive Structures and Intelligent Systems (SMASIS), September 21-23, 2015, Colorado Springs, USA.

E.C. Pavlis, A. Paolozzi, I. CIUFOLINI, C. Paris, G. Sindoni, A. Gabrielli. Use of LARES satellite data for Earth science. 23rd Conference of the Italian Association of Aeronautics and Astronautics – AIDAA, 17-19 November 2015, Torino, Italy.

I. CIUFOLINI, A. Paolozzi, C. Paris, G. Sindoni. The constellation of LARES and LAGEOS satellites for testing General Relativity. IEEE Aerospace Conference, Big Sky, Montana, Mar. 7-14, 2015.

A. Paolozzi, I. CIUFOLINI, C. Paris, G. Sindoni. Engineering Challenges of LARES Satellite, Designed to Test the Dynamics of General Relativity. ICEDyn 2015, International Conference on Structural Engineering Dynamics, Lagos, Algarve, Portugal, 22-24 June 2015.

E.C. Pavlis, G. Sindoni, A.Paolozzi, I. CIUFOLINI. Contribution of LARES and Geodetic Satellites on Environmental Monitoring. IEEE 15th International Conference on Environment and Electrical Engineering (EEEIC), June 10-13, 2015 Rome.

A. Paolozzi, I. CIUFOLINI, C. Paris, G. Sindoni. LARES-lab: a thermo-vacuum facility for research and e-learning. Proceedings of 7th International Conference on Computer Supported Education - CSEDU 2015, 23 - 25 May 2015 / Portugal, Lisbon

E. C. Pavlis, I. I. CIUFOLINI, A. Paolozzi, C. Paris, G. Sindoni. Quality assessment of LARES satellite ranging data. Proceedings of the 2nd IEEE International Workshop on Metrology for Aerospace (MetroAeroSpace), Benevento, Italy, June 4-5, 2015. Conference Proceedings, 1, p. 33-37. ISBN: 978-1-4799-7568-6

G. Sindoni, E. C. Pavlis, C. Paris, A. Paolozzi, I. CIUFOLINI, Orbital predictions for the LARES satellite mission. Proceedings of the 2nd IEEE International Workshop on Metrology for Aerospace (MetroAeroSpace), Benevento, Italy, June 4-5, 2015. Conference Proceedings, vol. 1, pp. 66-70, IEEE, ISBN: 978-1-4799-7568-6

I. CIUFOLINI, A. Paolozzi, V. Gurzadyan, E. Pavlis, R. Koenig, J. Ries, R. Matzner, R. Penrose, G. Sindoni and C. Paris, Dragging of Inertial Frames, Fundamental Physics and Satellite Laser Ranging, Chapter 4 of "**Frontiers in relativistic celestial mechanics**", Vol. 2, Ed. S. Kopeikin, De Gruyter Studies in Mathematical Phisics 22 (2014), pp. 157-186.

CIUFOLINI I., Paolozzi, A., Paris, C., Sindoni, G., The LARES satellite and its minimization of the thermal forces, Proceedings of IEEE International Workshop on Metrology for Aerospace (MetroAeroSpace), Benevento 29-30 May 2014, pp. 299-303.

CIUFOLINI I., Paolozzi A., E.C.Pavlis, R.Koenig, J.C.Ries, R.Matzner, V.Gurzadyan, G.Sindoni, C.Paris, A. Gabrielli, Preliminary results of LARES mission to test general relativity, 65th International Astronautical Congress - IAC 2014, Toronto 29 Sep.-3 Oct. (2014).

Sindoni G., Paris C., Paolozzi A., CIUFOLINI I., Pavlis E.C., Gabrielli A., Operation and data analysis of LARES satellite, 65th International Astronautical Congress - IAC 2014, Toronto 29 Sep.-3 Oct. (2014).

V.G.Gurzadyan, CIUFOLINI I., S.Sargsyan, G.Yegorian, S.Mirzoyan, A.Paolozzi, Satellite probing General Relativity and its extensions and Kolmogorov Analysis. **EUROPHYSICS LETTERS. EPL**, **102** (2013) 60002.

I. CIUFOLINI. Time travel, clock puzzles and their experimental tests. **EUROPEAN PHYSICAL JOURNAL** Web of Conferences **58**, 01005. doi: 10.1051/epjconf/20135801005

I. CIUFOLINI, Antonio Paolozzi, Rolf Koenig, Erricos C. Pavlis, John Ries, Richard Matzner, Vahe Gurzadyan, Roger Penrose, Giampiero Sindoni, Claudio Paris, Fundamental Physics and General Relativity with the LARES and LAGEOS satellites, **NUCLEAR PHYSICS B** (Proc. Suppl.) 243–244 (2013) 180–193

I. CIUFOLINI and Antonio Paolozzi Testing general relativity with a high-density satellite 21 October 2013, **SPIE Newsroom**. DOI: 10.1117/2.1201310.005029.

Moreno Monge B., Koenig R., Michalak G., CIUFOLINI I., Paolozzi A., and Sindoni G. Preliminary study for the measurement of the Lense- Thirring effect with the galileo satellites. **ACTA FUTURA** 7, 87 (2013).

Paolozzi A. and CIUFOLINI I. LARES succesfully launched in orbit: satellite and mission description. **ACTA ASTRONAUTICA**, 91, 313–321 (2013).

CIUFOLINI I., Moreno Monge B., Paolozzi A., Koenig R., Sindoni G., Michalak G., and Pavlis E. Monte Carlo simulations of the LARES space experiment to test general relativity and fundamental physics. **CLASSICAL AND QUANTUM GRAVITY**, 30 235009 (2013).

CIUFOLINI I. and Paolozzi A., LARES put to test Einstein and cosmology. **SPACE MAGAZINE**, Italian Space Agency, 127:36–41, 2013.

CIUFOLINI I., Paolozzi A., Pavlis E., Ries J., Gurzadyan V., Koenig R., Matzner R., Penrose R., and Sindoni G. Testing general relativity and gravitational physics using the LARES satellite. **THE EUROPEAN PHYSICAL JOURNAL PLUS**, 127:127–133, 2012.

CIUFOLINI I., E. Pavlis, A. Paolozzi, J. Ries, R. Koenig, R. Matzner, G. Sindoni, and H. Neumayer. Phenomenology of the Lense-Thirring effect in the solar system: Measurement of frame-dragging with laser ranged satellites. **NEW ASTRONOMY**, 17:341–346, 2012.

CIUFOLINI I., Paolozzi A., and Paris C. Overview of the LARES mis- sion: orbit, error analysis and technological aspects. **JOURNAL OF PHYSICS.** CONF. SER., 354:1–9, 2012.

Paolozzi A., CIUFOLINI I., Passeggio F., Caputo G., Caputo L., Bursi A., Mangraviti E., Onorati F., Paris C., and Chiodo A. LARES satellite and separation system. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–8, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd.

Paolozzi A., CIUFOLINI I., Paris C., Spano D., Battaglia G., and Rein- hart N. Thermal tests on LARES satellite components. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–5, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd. 1

CIUFOLINI I., Paolozzi A., Pavlis E., Ries J., Koenig R., Matzner R., Sla- binski V., V. Gurzadyan, Flamini E., Sindoni G., Paris C., and Neumayer H. Initial orbit determination results for the LARES satellite. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–7, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd.

Paolozzi A., CIUFOLINI I., Flamini E., Gabrielli A., and Mangraviti E. LARES is in orbit! some aspects of the mission. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–6, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd.

Paolozzi A., CIUFOLINI I., Paris C., Sindoni G., and Spano D. Quali- fication tests on the optical retroreflectors of LARES satellite. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–6, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd.

Paolozzi A., CIUFOLINI I., Vendittozzi C., and Felli F. Material and surface properties of LARES satellite. Proceedings of 63rd International Astronautical Congress IAC 2012, pages 1–7, Richmond, Surrey – GBR, 1-5 October, 2012. Maris Technologies Ltd.

CIUFOLINI I., Gurzadyan V.G., Penrose R., and Paolozzi A. Geodesic motion in general relativity: LARES in Earth's gravity. In: Low Dimensional Physics and Gauge Principles, 93-97, Singapore – SGP, World Scientific, 2013.

Pavlis E. C., CIUFOLINI I., and Paolozzi A. LARES: A new mission to improve the measurement of LenseThirring effect with satellite laser ranging. In: T. Nilsson H. Schuh, S. B¨ohm and N. Capitaine, editors, **Systemes de reference spatio-temporels**, pages 252–255, 2011.

CIUFOLINI I., Paolozzi A., Pavlis E., Ries J.and Koenig R., Matzner R., Sindoni G., and Neumayer H. Testing gravitational physics with satellite laser ranging. **THE EUROPEAN PHYSICAL JOURNAL PLUS**, 126:1–19, 2011.

CIUFOLINI I., Paolozzi A., Pavlis E., Ries J., Koenig R., and Matzner R. LARES, laser-ranged satellite for testing general relativity. **SPACE RESEARCH TODAY**, 182:11–25, 2011.

Ries J., CIUFOLINI I., Pavlis E., Paolozzi A., Koenig R., Matzner R., Sindoni G., and Neumayer H. The Earth's frame-dragging via laser-ranged satellites: A response to some considerations on the present-day results for the detection of frame-dragging after the final outcome of GP-B by Iorio l. **EUROPHYSICS LETTERS**, 96:1–5, 2011.

Paolozzi A., CIUFOLINI I., and Vendittozzi C. Engineering and scientific aspects of LARES satellite. **ACTA ASTRONAUTICA**, 69:127–134, 2011.

I. CIUFOLINI. Frame-dragging, gravitomagnetism and lunar laser ranging. **NEW ASTRONOMY**, 15:332– 337, 2010.

I. CIUFOLINI, A. Paolozzi, E. Pavlis, R. Koenig, J. Ries, R. Matzner, R. Neubert, D. Rubincam, D. Arnold, V. Slabinski, G. Sindoni, C. Paris, M. Ramiconi, D. Spano, C. Vendittozzi, H. Neumayer, LARES Laser Relativity Satellite, Proceedings of the 17th International Workshop on Laser Ranging, Bad Kotzting, Germany, May 16-20, 2011, pp. 19-23,

CIUFOLINI I., Pavlis E., Ries J.and Koenig R., Sindoni G., Paolozzi A., and Neumayer H. Gravitomagnetism and Its Measurement with Laser Ranging to the LAGEOS Satellites and GRACE Earth Gravity Models, In: ***General Relativity and John Archibald Wheeler***, volume 367, pages 371–434. SpringerVerlag GmbH, Berlino – DEU, 2010.

CIUFOLINI I., Paolozzi A., Pavlis E., Ries J., Koenig R., Matzner R., and Sindoni G. The LARES Space Experiment: LARES Orbit, Error Analysis and Satellite Structure, In: ***General Relativity and John Archibald Wheeler***, volume 367, pages 467–492. Springer-Verlag GmbH, Berlino – DEU, 2010.

CIUFOLINI I. and Matzner R. Introduction to General Relativity and John Archibald Wheeler, In: ***General Relativity and John Archibald Wheeler***, volume 367, pages 1–6. Springer-Verlag GmbH, Berlino – DEU, 2010. Introduction to the theory of General Relativity.

Vendittozzi C., Felli F., Paolozzi A., and CIUFOLINI I. Material and manufacturing issues of a laser ranged satellite. pages 78–82, CASSINO (FR) – ITA, July 7-10, 2010. Gruppo Italiano Frattura.

Paolozzi A., CIUFOLINI I., Schirone L., Peroni I., Paris C., Spano C., Sindoni G., Vendittozzi C., Battaglia G., and Ramiconi M. Tests of LARES cube corner reflectors in simulated space environment, preliminary results. In 61st International Astronautical Congress (IAC 2010), volume 9, pages 7390–7396, Red Hook, NY – USA, 27 September - 1 October 2010. Curran Associates, Inc.

CIUFOLINI I., Paolozzi A., Pavlis E.C., Ries J.C., Koenig R., Matzner R., Sindoni G., Neumayer H.. Toward a one percent measurement of frame dragging by spin with satellite laser ranging to LAGEOS, LAGEOS 2 and LARES and GRACE gravity models. **SPACE SCIENCE REVIEWS**, 148:71–104, 2009.

CIUFOLINI I. and et al. Scientific aspects of the LARES mission. In 60th International Astronautical Congress 2009 (IAC 2009), pages 3537–3544, Red Hook, NY – USA, 12-16 October 2009. Curran Associates, Inc.

A. Paolozzi, CIUFOLINI I., and et al. Technogical challenges for manufacturing LARES satellite. In 60th International Astronautical Congress 2009 (IAC 2009), pages 5925–5931, Red Hook, NY – USA, 12-16 October 2009. Curran Associates, Inc.

I. Peroni, CIUFOLINI I., and et al. Testing the LARES separation system. In 60th International Astronautical Congress 2009 (IAC 2009), pages 8126–8131, Red Hook, NY – USA, 12-16 October 2009. Curran Associates, Inc.

A. Paolozzi, CIUFOLINI I., and et al. Issues on LARES satellite material. In 60th International Astronautical Congress 2009 (IAC 2009), pages 5585–5591, Red Hook, NY – USA, 12-16 October 2009. Curran Associates, Inc. 3

A. Paolozzi, CIUFOLINI I., C. Vendittozzi, P. Apollonio, and A. Bursi. Cost effective center of mass determination of LARES satellite (12 pages). In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

A. Paolozzi, CIUFOLINI I., F. Felli, A. Brotzu, D. Pilone, C. Vendittozzi, F. Passeggio, and L. Caputo. Material and manufacturing of LARES satellite. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

A. Paolozzi, CIUFOLINI I., G. Sindoni, M. Ramiconi, and F. Onorati. Design of LARES separation system. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

A. Paolozzi, CIUFOLINI I., A. Lucantoni, and D. Arnold. Optical design of LARES satellite. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

CIUFOLINI I., A. Paolozzi, G. Sindoni, E. Pavlis, F. Bracciaferri, F. Longo, A. Gabrielli, S.Pirrotta, D. Barbagallo, and F.Venditti. Objectives of LARES satellite. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

A. Paolozzi, CIUFOLINI I., C. Vendittozzi, I. Peroni, and A. Gabrielli. Mechanical design of LARES satellite. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

A. Paolozzi, CIUFOLINI I., C. Paris, L. Acquaroli, and P. Piersigilli. Tests on LARES separation system components using fiber optic sensors. In AIDAA Congress 2009, Roma – ITA, 2009. AIDAA.

CIUFOLINI I. et al., LARES (LAser RElativity Satellite). Scientific Support DOCUMENT/PROPOSAL for ASI (Italian Space Agency), 2009.

D. Arnold, G. Bellettini, A. Boni, C. Cantone, CIUFOLINI I., D. G. Cur- rie, S. Dell'Agnello, G. O. Delle Monache, M. A. Franceschi, M. Garattini, A. Lucantoni, T. Napolitano, A. Paolozzi, R. Tauraso, and R. Vittori. The INFN-lnf space climatic facility. **Astroparticle, Particle and Space Physics, Detectors and Medical Physics Applications**, volume 4, pages 842–846, Singapore – SGP, 2007 2008. World Scientific.

E. Pavlis, CIUFOLINI I., and R. Koenig. Recent results from SLR experiments in fundamental physics. In Proceedings of the 15th International Workshop on Laser Ranging, pages 1–10, Camberra – AUS, October 15-20, 2006 2008. EOS Space Systems Pty Limited.

Paolozzi A., CIUFOLINI I., and et al. Fibre optic sensors for the validation of the numerical simulation on the breadboard of the LARES separation system. In 59th IAC Congress, Glasgow, Scotland – GBR, 2008. IAC.

CIUFOLINI I. et al. Study for INFN of the LARES experiment, 2007.

CIUFOLINI I. et al. Studies on themes and models in cosmology and fundamental physics (COFIS) for ASI (Italian Space Agency), 2007.

CIUFOLINI I. and et al. Patent number rm 2008a000057: Progetto innovativo di un satellite inseguito via laser, 2008.

CIUFOLINI I. and Bosco A. et al. Probing gravity in neo's with high-accuracy laser-ranged test masses. **INTERNATIONAL JOURNAL OF MODERN PHYSICS D**, 16:2271–2285, 2007.

CIUFOLINI I. Dragging of inertial frames. **NATURE**, 449:41–47, 2007.

Paolozzi A., CIUFOLINI I., and et al. The design of LARES: A satellite for testing general relativity. In: Proceedings of the International Astronautical Congress IAC 2007. IAC-07-B4.2.07

CIUFOLINI I., E. Pavlis, and R. Peron. Determination of frame–dragging using the Earth gravity models from Champ and GRACE. **NEW ASTRONOMY**, 11:527–550, 2006.

I. CIUFOLINI, with Pavlis E., and Koenig R. Recent results from SLR experiments in fundamental physics. In Proc. 15th International Laser Ranging Workshop, pages 1–10, Canberra – AUS, 2006. International Laser Ranging Service.

I. CIUFOLINI. On the orbit of the LARES satellite. http://xxx.lanl.gov/abs/gr-qc/0609081, 2007.

I. CIUFOLINI and E. Pavlis. On the measurement of the Lense-Thirring effect using the nodes of the LAGEOS satellites. **NEW ASTRONOMY**, 10:636–651, 2005.

I. CIUFOLINI Frame-Dragging and Its Measurement, in **Gravitation: from the Hubble length to the Planck length**, eds. I. CIUFOLINI et al., p 27–69. Institute of Physics Publishing, Bristol _ GBR, 2005.

I. CIUFOLINI. Gravitomagnetism. In: *TOWARDS NEW MILESTONES IN OUR QUEST TO GO BEYOND THE STANDARD MODEL*. Proceedings of the International School of Subnuclear Physics, volume 43, pages 146–197, SINGAPORE – SGP, 29 August – 7 September 2005. World Scientific.

Schiller S., CIUFOLINI I., and et al. Precision tests of general relativity and of the equivalence principle using ultrastable optical clocks: a mission proposal. In: ESA SP-588, pages 39–42, NOORDWIJK – NLD, 2005. European Space Agency.

I. CIUFOLINI, Lorenzo Iorio, Erricos C Pavlis, Stephan Schiller, Hansjorg Dittus, and Claus Lammerzahl. On the possibility of measuring the Lense–Thirring effect with a LAGEOS–LAGEOS II–optis–mission. **CLASSICAL AND QUANTUM GRAVITY**, 21:2139–2151, 2004.

I. CIUFOLINI, with C. Lammerzahl, H. Dittus, L. Iorio, H. Mu¨ller, A. Peters, E. Samain, S. Scheithauer, and S. Schiller. Optis - an Einstein mission for improved tests of special and general relativity. **GENERAL RELATIVITY AND GRAVITATION**, 36:2257–2270, 2004.

I. CIUFOLINI Frame-dragging and Lense-Thirring effect. **GENERAL RELATIVITY AND GRAVITATION**, 36:2373–2415, 2004.

CIUFOLINI I., Lucchesi D., Jose I. Andrese, Erricos C. Pavlis, Roberto Peron, Ron Noomen, and Douglas G. Currie. LAGEOS II perigee rate and eccentricity vector excitations residuals and the yarkovsky– schach effect. **PLANETARY AND SPACE SCIENCE**, 52:699–710, 2004.

CIUFOLINI I. and Pavlis E. A confirmation of the general relativistic prediction of the Lense–Thirring effect. **NATURE (Letters)**, 431:958–960, 2004.

S. Schiller, P. Antonini, M. Okhapkin, I. Ernsting, A. Wicht, C. Lammerzahl, I. CIUFOLINI, H. Dittus, L. Iorio, H. Muller, A. Peters, E. Samain, and S. Scheithauer. The relativity mission optis: development of optical rechniques. In Proceedings of the 5th International Conference on Space Optics (ICSO 2004), pages 826–826, NOORDWIJK – NLD, 30 Marzo - 2 Aprile 2004. ESA Publications Division.

I. CIUFOLINI, A. Paolozzi, D.G. Currie, and E.C. Pavlis. LARES/Weber-sat, frame-dragging and fundamental physics. In Proceedings of Frontier Science 2004, Physics and Astrophysics in Space, volume 37, pages 499–512, Frascati – ITA, June 14 –19, 2004. Istituto Nazionale di Fisica Nucleare, Laboratori.

I. CIUFOLINI Les referentiels entraınes. Premiere mise en evidence de l'effet d'entraınement des referentiels du a la rotation de la Terre. **POUR LA SCIENCE**, 38:50–51, 2003.

I. CIUFOLINI, S. Kopeikin, B. Mashhoon, and F. Ricci. On the gravitomagnetic time delay. **PHYSICS LETTERS A**, 308:101–109, 2003.

I. CIUFOLINI Frame-dragging and gravitomagnetism: Theory and experiment. In: *2001: A RELATIVISTIC SPACETIME ODYSSEY. Experiments and Theoretical Viewpoints on General Relativity and Quantum Gravity.* Proceedings of the 25th Johns Hopkins Workshop on Current Problems in Particle Theory, pages 99–140, SINGAPORE – SGP, 3–5 September 2001 2003. World Scientific. Plenary Talk.

I. CIUFOLINI, D. Currie, and A. Paolozzi. The LARES mission for testing the dynamics of general relativity. In Proceedings of IEEE Aerospace Conference, 2003, volume 2, pages 693–702, New York – USA, 8-15 March 2003. IEEE-Xplore.

I. CIUFOLINI, D. Currie, and A. Paolozzi. Weber-sat/LARES space mission. In Proceedings of AIDAA conference, Rome, Italy, 2003, Roma – ITA, 15-19 September 2003. AIDAA.

D. M. Lucchesi, E. C. Pavlis, I. CIUFOLINI, and Peron R. The Yarkovsky-Schach effect on LAGEOS satellites and its modelling. In Geophys. Res. Abs., Vol. 5, 07494, 2003, Gottingen – DEU, April 2003. Copernicus Gesellschaft mbH. Abstract 7494.

I. CIUFOLINI and F. Ricci. Time-delay due to spin inside a rotating shell. **CLASSICAL AND QUANTUM GRAVITY**, 19:3875–3881, 2002. 6

L. Iorio, I. CIUFOLINI, and E. Pavlis. Measuring the relativistic perigee advance with satellite laser ranging. **CLASSICAL AND QUANTUM GRAVITY**, 19:4301–4309, 2002.

Iorio L., Lucchesi D., and CIUFOLINI I. The LARES mission revisited: an alternative scenario. **CLASSICAL AND QUANTUM GRAVITY**, 19:4311–4325, 2002.

CIUFOLINI I. and Ricci F. Time delay due to spin and gravitational lensing. **CLASSICAL AND QUANTUM GRAVITY**, 19:3863–3874, 2002.

I. CIUFOLINI Test of general relativity, 1995-2002 measurement of frame- dragging. In Physics in Collision 22: Proceedings of the XXII International Conference, pages 128–139, Stanford – USA, June 20-22, 2002. American Institute of Physics.

I. CIUFOLINI Gravitomagnetic field, frame-dragging and Lense-Thirring effect. In Proceedings of the ERES Spanish Conference on General Relativity, pages 25–25, SINGAPORE – SGP, September 2000 2001. World Scientific.

I. CIUFOLINI Detection and measurement of gravitomagnetism. In Proceedings of the ERES Spanish Conference on General Relativity, pages 35–35, SINGAPORE – SGP, September 2000 2001. World Scientific.

I. CIUFOLINI and V. Gorini. Gravitational waves: an introduction. In: *II SIGRAV School on General Relativity and Gravitation, Bristol – GBR, April 1999 2001.* Inst. of Physics Pub. **2001: A Relativistic Spacetime Odyssey**. World Scientific, NEW JERSEY – USA, 2001.

I. CIUFOLINI The 1995-99 measurements of the Lense-Thirring ef- fect using laser-ranged satellites. **CLASSICAL AND QUANTUM GRAVITY**, 17:2369–2380, 2000.

I. CIUFOLINI and A. Paolozzi. LARES: a new laser-ranged satellite for fundamental physics and general relativity. **ACTUAL PROBLEMS OF AVIATION AND AEROSPACE SYSTEMS**, 1:61–73, 1999.

I. CIUFOLINI, E. Pavlis, F. Chieppa, E. Fernandes-Vieira, and J. Perez- Mercader. Test of general relativity and measurement of the Lense- Thirring effect with two Earth satellites. **SCIENCE**, 279:2100–2103, 1998.

I. CIUFOLINI Detection and measurement of the gravitomagnetic field. In Proceedings of the 2nd International Conference on Phenomenology of Unification from Present to Future, 195–204, ROMA – ITA, 1998. World Scientific Singapore.

I. CIUFOLINI and E. Pavlis. The gravitomagnetic field and its measurement with the LAGEOS satellites. In Proceedings of the Third William Fairbank Meeting, 185–185, SINGAPORE – SGP, June 29 - July 4, 1998. World Scientific.

I. CIUFOLINI A space test of general relativity. In Proceedings of the XIII Italian Congress on General Relativity and Gravitation, Berlin – DEU, 1998. Springer Verlag.

I. CIUFOLINI, A. Paolozzi, I. Peroni, and A. Gabrielli. A study for a laser-ranged relativity satellite. In Proceedings of the Sixth Pan American Congress of Applied Mechanics (PACAM VI), volume 38, Amsterdam – NLD, January 4-8 1999 1998. Elsevier.

I. CIUFOLINI and et al. LARES, LAser RElativity Satellite, *PHASE A STUDY for the Italian Space Agency (ASI)*, 1998.

P. Bender, A. Brillet, I. CIUFOLINI, and et al. LISA, Laser Interferometer Space Antenna for the detection and observation of gravitational waves, *Pre-phase A report for European Space Agency*. http://list.caltech.edu/lib/exe/fetch.php?media=documents:early:prephasea.pdf, 1998.

CIUFOLINI I., Chieppa F., Lucchesi D., and Vespe F. Test of Lense- Thirring orbital shift due to spin. **CLASSICAL AND QUANTUM GRAVITY**, 14:2701–2726, 1997.

I. CIUFOLINI, D. Lucchesi, F. Vespe, and F. Chieppa. Measurement of gravitomagnetism. **EUROPHYSICS LETTERS**, 39:359–364, 1997.

I. CIUFOLINI, A. Paolozzi, and I. Peroni. A preliminary study of a satellite to minimize solar radiation pressure. In XIV Congresso Nazionale Aidaa, volume Proceedings of the 14th AIDAA, pages –, Roma – ITA, 20-24 October 1997. AIDAA.

K. Danzmann and LISA study team (with I. CIUFOLINI). Lisa: laser interferometer space antenna for gravitational wave measurements. **CLASSICAL AND QUANTUM GRAVITY**, 13:247–250, 1996.

CIUFOLINI I., Lucchesi D., Vespe F., and Mandiello A. Measurement of dragging of inertial frames and gravitomagnetic field using laser-ranged satellites. **NUOVO CIMENTO**, 109A:575–590, 1996.

I. CIUFOLINI On a new method to measure the gravitomagnetic field using two orbiting satellites. **NUOVO CIMENTO**, 109:1709–1720, 1996.

I. CIUFOLINI and et al. Possible relativity tests on the mercury orbiter mission. In Proceedings of the COSPAR Symposium on Fundamental Physics in Space-FPS1, volume Proceedings of the COSPAR Symp, pages 1–9, Paris – FRA, July 1996. COMMITTEE ON SPACE RESEARCH (COSPAR).

I. CIUFOLINI Mach's Principle: From Newton's Bucket to Quantum Gravity, chapter **Dragging of Inertial Frames, Gravitomagnetism, and Mach's Principle**, pages 386–402. Birkhauser, BOSTON – USA, 1995.

I. CIUFOLINI and J. A. Wheeler. **GRAVITATION AND INERTIA. Princeton University Press**, 1995. *Winner of the 1996 Association of American Publishers Award for Best Professional/Scholarly Book in Physics and Astronomy.*

F. Hoyle, J. B. Barbour, J. Ehlers, J. Renn, K. Kuchar, M. Jones, D. Lyndenbell, H. Bondi, D. Raine, I. CIUFOLINI, C. Hoefer, J. Isenberg, A. K. T. Assis, K. Nordtvedt, D.G. King, C. Will, J. Norton, J. Earman, R. Nojarov, and H. D. Zeh. General discussion: what is the machian problem? In: **Mach's Principle - From Newtons Bucket to Quantum Gravity**, volume 6, pages 91–106, Boston – USA, 26-30 Luglio 1993 1995. Birkhaeuser Boston.

I. CIUFOLINI, Satellite laser ranging and gravitational physics. In Proceedings of the XXI General Assembly of the International Union of Geodesy and Geophysics, Boulder – USA, 2-14 July 1995. University of Colorado at Boulder.

R. Hellings, L. Blanchet, I. CIUFOLINI, and et al. Orbiting Medium Explorer for Gravitational Astrophysics, OMEGA, *NASA midex report*, 1995.

I. CIUFOLINI Gravitomagnetism and status of the LAGEOS-III experiment. **CLASSICAL AND QUANTUM GRAVITY**, 11:A73–A81, 1994.

P.L. Bender, N. Ashby, I. CIUFOLINI, and L. Iess. Mercury relativity orbiter mission. In Proceedings of the Symposium on Future Fundamental Physics Missions in Space and Enabling Technologies, 5-7 April 1994, El Escorial, Spain, Madrid – ESP, Apr. 5-7 1994. Instituto Nacional de Tecnica Aeroespacial.

I. CIUFOLINI, Testing gravitomagnetism in space. In Proceedings of the Symposium on Future Fundamental Physics Missions in Space and Enabling Technologies, 5-7 April 1994, El Escorial, Spain, Madrid – ESP, 57 April 1994. Instituto Nacional de Tecnica Aeroespacial.

I. CIUFOLINI Testing general relativity and gravitational waves in space. In: **Phenomenology of Unification from Present to Future**, pages 419–419, SINGAPORE – SGP, 23-26 March, 1994. World Scientific.

I. CIUFOLINI The theoretical significance of experimental gravitation. In 10th Italian Conference on General Relativity and Gravitational Physics, Bardonecchia (Torino September 1-5 1992), pages 149–149, SINGAPORE – SGP, September 1-5 1992 1994. World Scientific.

P. Bender, I. CIUFOLINI, and K. Nordtvedt. Orbital tests of general relativity: the smrpm and stuff proposals. In Proceedings of the Symposium on Future Fundamental Physics Missions in Space and Enabling Technologies, 5-7 April 1994, El Escorial, Spain, Madrid – ESP, 5-7 April . 1994. Instituto Nacional de Tecnica Aeroespacial.

I. CIUFOLINI and et al. Study of LAGEOS III contributions to general relativity, gravitation, geodynamics and geodesy. *NASA-astrophysics report*, 1994.

I. CIUFOLINI, P. Farinella, A. Nobili, D. Lucchesi, and L. Anselmo. Results of a joint ASI-NASA study on the LAGEOS gravitomagnetic experiment and the nodal perturbations due to radiation pressure and particle drag effects. **IL NUOVO CIMENTO B**, 108:151–162, 1993.

I. CIUFOLINI and R. Matzner. Non-riemannian theories of gravity and lunar and satellite laser ranging. **INTERNATIONAL JOURNAL OF MODERN PHYSICS A**, 7:843–852, 1992.

I. CIUFOLINI, F. Fuligni, V. Iafolla, and S. Nozzoli. Testing deviations from the inverse square law with a freely falling gravity gradiometer at balloon altitudes. **IL NUOVO CIMENTO C**, 15:973–982, 1992.

I. CIUFOLINI, F. Vespe, and D. Lucchesi. LAGEOS III and its non-gravitational perturbations. In 10th Italian Conference on General Relativity and Gravitational Physics, Bardonecchia (Torino September 1-5 1992), pages 453–453, SINGAPORE–SGP, September 1-5 1992. World Scientific.

I. CIUFOLINI. Status of the LAGEOS III experiment to measure the gravitomagnetic field. In Proceedings of the XXVIIth RENCONTRE DE MORIOND, pages 433–437, GIF-SUR-YVETTE – FRA, January 25 - February 1, 1992. Editions Frontieres.

I. CIUFOLINI. Metric theories of gravity and their post-newtonian limit. In Proceedings of the Sixth Marcel Grossmann Meeting on General Relativity, pages 371–371, SINGAPORE – SGP, May 1992. World Scientific.

I. CIUFOLINI. New class of metric theories of gravity not described by the parametrized post-newtonian (ppn) formalism. **INTERNATIONAL JOURNAL OF MODERN PHYSICS A**, 30:5511–5532, 1991.

I. CIUFOLINI. An update of the LAGEOS-III gravitomagnetic experiment. In Proceedings of the IX Italian Conference on General Relativity and Gravitational Physics, pages 131–132, SINGAPORE – SGP, 1990 1991. World Scientific.

S. Casotto, I. CIUFOLINI, G. Bianco, and F. Vespe. Earth satellites and gravitomagnetic field. **IL NUOVO CIMENTO B**, 105:589–599, 1990.

I. CIUFOLINI, M. Dobrowolny, and L. Iess. Effect of particle drag on the LAGEOS node and measurement of the gravitomagnetic field. **IL NUOVO CIMENTO B**, 105:572–588, 1990.

I. CIUFOLINI. General relativistic measurement with satellite laser ranging, lunar laser ranging and very long baseline interferometry. **IL NUOVO CIMENTO C,** 13:67–78, 1990.

I. CIUFOLINI. Tests of geometrodynamics and measure of the gravitomagnetic field. In First William Fairbank Meeting on Relativistic Gravitational Experiments in Space, volume 7, pages 170–170, SINGAPORE – SGP, September 1990. World Scientific. 10

F. Fuligni, V. Iafolla, and I. CIUFOLINI. The frascati gradiometer and measurements of deviations from the inverse square law. In First William Fairbank Meeting on Relativistic Gravitational Experiments in Space, pages 324–324, SINGAPORE – SGP, 1990. World Scientific.

I. CIUFOLINI. A comprehensive introduction to the LAGEOS gravitomagnetic experiment: from the importance of the gravitomagnetic field in physics to preliminary error analysis and error budget. **INTERNATIONAL JOURNAL OF MODERN PHYSICS A**, 4:3083–3152, 1989.

I. CIUFOLINI. LAGEOS III and the gravitomagnetic field. In **NASA Conference Publication, volume 3046, pages 126–126**, Ann Arbor – USA, June 1988 1989. Scientific and Technical Information Office.

I. CIUFOLINI. New tests of Einstein geometrodynamics. In The Fifth Marcel Grossmann Meeting on recent developments in theoretical and experimental general relativity, gravitation and relativistic field theories: proceedings of the meeting held at the University of Western Australia, 8-13 August 1988, SINGAPORE – SGP, 8-13 August 1988 1989. World Scientific.

I. CIUFOLINI. An introduction to the LAGEOS-3 experiment. In Proceedings 12th International Conference on General Relativity and Gravitation, Boulder, Colorado, July 2-8, 1989, page 477, Boulder – USA, July 28, 1989. University of Colorado at Boulder.

I. CIUFOLINI, B. Tapley, and et. al. Measuring the Lense Thirring precession using a second LAGEOS saltellite. CSR-UT publication n. CSR-89-3, 1989.

I. CIUFOLINI and et al. Measurement of the gravitomagnetic field using a pair of laser ranged satellites. Study for the Italian Space Agency, final CNR report, 1989.

B. Bertotti, I. CIUFOLINI, and P. Bender. Test of the geodetic precession. In Bulletin of APS, 1988 March Meeting of the American Physical Society, Austin, Texas, Austin – USA, March 1988. American Physical Society.

I. CIUFOLINI. Preliminary error budget of the LAGEOS gravitomagnetic experiment. In Bulletin of APS, 1988 March Meeting of the American Physical Society, Austin, Texas, Austin – USA, March 1988. American Physical Society.

I. CIUFOLINI and M. Demiansky. Erratum: How to measure the curvature of space-time. **PHYSICAL REVIEW D**, 35:773, 1987.

I. CIUFOLINI. The LAGEOS Lense-Thirring precession and the LAGEOS non-gravitational nodal perturbations. **CELESTIAL MECHANICS**, 40: 19–33, 1987.

BERTOTTI B., CIUFOLINI I., and BENDER P. New test of general relativity: Measurement of de sitter geodetic precession rate for lunar perigee. **PHYSICAL REVIEW LETTERS**, 58:1062–1065, 1987.

I. CIUFOLINI. New relativistic measurements with laser ranged satellites. In New Relativistic Measurements With Laser Ranged Satellites, Antibes – FRA, 22-26 September 1986 1987. GRGS-CERGA.

B. Bertotti, I. CIUFOLINI, and P. Bender. Test of the de Sitter-geodetic precession of lunar perigee. In Proceedings SIF Conference, Bologna – ITA, October 12-17, 1987. SOCIETA` ITALIANA DI FISICA.

CIUFOLINI I. and Demianski M. How to measure the curvature of space- time. **PHYSICAL REVIEW D**, 34:1018–1020, 1986.

I. CIUFOLINI. Test of the gravitomagnetic field via laser-ranged satellites. **FOUNDATIONS OF PHYSICS**, 16:259–265, 1986.

I. CIUFOLINI. Generalized geodesic deviation equation. **PHYSICAL REVIEW D**, 34:1014–1018, 1986.

I. CIUFOLINI. Measurement of the Lense-Thirring drag on high-altitude laser-ranged artificial satellites. **PHYSICAL REVIEW LETTERS**, 56:278–281, 1986.

I. CIUFOLINI and R. Matzner. Non-gravitational perturbations of high altitude artificial satellites. In Fourth Marcel Grossmann Meeting on General Relativity, pages 395–400, Heidelberg – DEU, 1985 1986. Astronomisches Rechen-Institut (ARI).

I. CIUFOLINI. A new laser ranged satellite, LAGEOS 3, to measure the gravitomagnetic field. In 7th Italian Conference on General Relativity and Gravitational Physics, Rapallo (Genoa), September 3-6, 1986, pages 431–433, (World Scientific, 1986).

I. CIUFOLINI. Theory and experiments in general relativity and other metric theories. Ph.D dissertation, Univ. of Texas, Austin, (Ann Arbor, Michigan, 1984).

I. CIUFOLINI and et al. Equilibrium configurations of neutron stars and the parametrized post newtonian metric theories of gravitation. **THE ASTROPHYSICAL JOURNAL**, 275:867–877, 1983.

I. CIUFOLINI and et al. On the value of the masses of neutron stars in the parametrized post newtonian formalism**. ASTRONOMY AND ASTROPHYSICS**, 97:L12–L13, 1981.

I. CIUFOLINI Ellipticity of static perfect fluids in preferred-frame theories of gravity. **PHYSICAL REVIEW D**, 26:1854–1857, 1982.