

- ANNA M. NOBILI: PAPERS PUBLISHED ON INTERNATIONAL REFEREED JOURNALS

1. A.M. Nobili: Secular effects of tidal friction on the planet-satellite systems of the solar system, *The Moon and the Planets* 18, 203-216, 1978
2. P. Farinella, A.M. Nobili: A simple explanation of some characteristics of the asteroidal belt based on the restricted 3-body problem, *The Moon and the Planets* 18, 241-250, 1978
3. P. Farinella, A.M. Nobili, P. Paolicchi: A tidal hypothesis about the origin of planetary rotation, *The Moon and the Planets* 18, 195-201, 1978
4. P. Farinella, P. Paolicchi, A. Milani, A.M. Nobili: Lifetime of an elliptical ring around Uranus, *Nature* 27, 535, 1978
5. P. Farinella, F. Ferrini, A.M. Nobili, P. Paolicchi: An explanation for the light curves of Jupiter's and Saturn's satellites, *The Moon and the Planets* 20, 385-395, 1979.
6. P. Farinella, A. Milani, A.M. Nobili, G.B.Valsecchi: Tidal evolution and the Pluto-Charon system, *The Moon and the Planets* 20, 415-421, 1979.
7. P. Farinella, F. Ferrini, A.M. Nobili, P. Paolicchi: On the formation and stability of Uranus' Rings, *The Moon and the Planets* 22, 103-111, 1980
8. R. Bevilacqua, P. Farinella, O. Menchi, A. Milani, A.M. Nobili: Resonances and close approaches, I: the Titan-Hyperion case, *The Moon and the Planets* 22, 141-152, 1980
9. P. Farinella, A. Milani, A.M. Nobili, G.B.Valsecchi: Some remarks on the capture of Triton and the origin of Pluto, *Icarus* 44, 810- 812, 1980
10. P. Farinella, A. Milani, A.M. Nobili: The measurement of the gravitational constant in an orbiting laboratory, *Astrophysics and Space Science* 73, 417-433, 1980
11. P. Farinella, F. Ferrini, A. Milani, A.M. Nobili: Is Mimas differentiated?, *The Moon and the Planets* 24, 465-466, 1981
12. S. Catalano, R. M<sup>c</sup>Crosky, A. Milani, A.M. Nobili: Optical tracking of synchronous Earth's satellites for geophysical purposes, *Journal of Geophysical Research* 88, 669-676, 1983
13. L. Anselmo, B. Bertotti, P. Farinella, A. Milani, A.M. Nobili: Orbital perturbations due to radiation pressure for a spacecraft of complex shape, *Celestial Mechanics* 29, 27-43, 1983
14. P. Farinella, A. Milani, A.M. Nobili, P. Paolicchi, V.Zappalà: The shape of the small satellites of Saturn: gravitational equilibrium vs. solid-state strength, *The Moon and the Planets* 28, 251-258, 1983
15. L. Anselmo, P. Farinella, A. Milani, A.M. Nobili: Effects of the Earth-Reflected sunlight on the orbit of the LAGEOS satellite, *Astronomy and Astrophysics* 117, 3-8, 1983
16. P. Farinella, A. Milani, A.M. Nobili, P. Paolicchi, V.Zappalà: Hyperion: collisional disruption of a resonant satellite, *Icarus* 54, 353-360, 1983
17. A. Milani, A.M. Nobili: On topological stability in the general 3-body problem, *Celestial Mechanics* 31, 213-240, 1983
18. A. Milani, A.M. Nobili: On the stability of hierarchical 4-body systems, *Celestial Mechanics* 31, 241-291, 1983
19. B. Bertotti, P. Farinella, A. Milani, A.M. Nobili, F. Sacerdote: Linking reference systems from space, *Astronomy and Astrophysics* 133, 231-238, 1984
20. P. Farinella, A. Milani, A.M. Nobili, P. Paolicchi, V. Zappalà: The shape and structure of Mimas, *Earth Moon and Planets* 30, 39-42, 1984
21. A. Milani, A.M. Nobili: Resonance locking between Jupiter and Uranus, *Nature* 310, 753-755, 1984

22. A. Milani, A.M. **Nobili**: Resonant structure of the outer asteroid belt, *Celestial Mechanics* 34, 343-355, 1984
23. A. Milani, A.M. **Nobili**: The depletion of the outer asteroid belt, *Astronomy and Astrophysics* 144, 261-287, 1985
24. A. Milani, A.M. **Nobili**: Resonant structure of the outer Solar System, *Celestial Mechanics* 35, 269-287, 1985
25. F. Barlier, M. Carpino, P. Farinella, F. Mignard, A. Milani, A.M. **Nobili**: Non gravitational perturbations on the semimajor axis of LAGEOS, *Annales Geophysicae* 4 A 3 , 193-210, 1986
26. A. Milani, A.M. **Nobili**, K. Fox, M. Carpino: Long term changes in the semimajor axes of the outer planets, *Nature* 319, 386-388, 1986
27. A.M. **Nobili**, C.M. Will: The real value of Mercury's perihelion advance, *Nature* 320, 39-41, 1986
28. M. Carpino, P. Farinella, A. Milani, A.M. **Nobili**: Sensitivity of LAGEOS to changes in Earth's (2,2) gravity coefficients, *Celestial Mechanics* 39, 1-13, 1986
29. A. Milani, A.M. **Nobili**, M. Carpino: Secular variations of the semimajor axes: theory and experiments, *Astronomy and Astrophysics* 172, 265-279, 1987
30. M. Carpino, A. Milani. A.M. **Nobili**: Long term numerical integrations and synthetic theories for the motion of the outer planets, *Astronomy and Astrophysics* 181, 182-194, 1987
31. A.M. **Nobili**: An international campaign for optical observations of geosynchronous satellites (COGEOS): scientific aims and organization, *CSTG (International Coordination of Space Techniques for Geodynamics) Bulletin no. 9*, 19-30, 1987
32. A.M. **Nobili**, A. Milani. P. Farinella: Testing newtonian gravity in space, *Physics Letters A* 120/9, 437-441, 1987
33. A. Milani, A.M. **Nobili**: Instability of the 2+2 body problem, *Celestial Mechanics* 41, 153-160, 1988
34. A.M. **Nobili**, A. Milani, P. Farinella: The orbit of a space laboratory for the measurement of G, *The Astronomical Journal* 95, 576-578, 1988
35. A. Milani, A.M. **Nobili**: Integration error over very long time spans, *Celestial Mechanics* 43, 1-34, 1988
36. A.M. **Nobili**, A. Milani, M. Carpino: Fundamental frequencies and small divisors in the orbits of the outer planets, *Astronomy and Astrophysics* 210, 313-336, 1989
37. A. Milani, M. Carpino, G. Hahn, A.M. **Nobili**: Dynamics of planet-crossing asteroids: classes of orbital behavior. Project SPACEGUARD, *Icarus* 78, 212-269, 1989
38. A.E. Roy, I.W. Walker, A.J. MacDonald, I.P. Williams, K. Fox, C.D. Murray, A. Milani, A.M. **Nobili**, P.J. Message, A.T. Sinclair, M. Carpino: Project LONGSTOP, *Vistas in Astronomy* 32, 95-116, 1988
39. A.M. **Nobili**, J.A. Burns: Solar system chaos, *Science* 244, 1425, 1989
40. A.M. **Nobili**: Synthetic Secular theories of planetray orbits: regular and chaotic behavior, *Celestial Mechanics* 45, 293-304, 1989
41. G. Afonso, F. Barlier, M. Carpino, P. Farinella, F. Mignard, A. Milani, A.M. **Nobili**: Orbital effects of LAGEOS' seasons and eclipses, *Annales Geophysicae* 7(5), 501-514, 1989
42. A. Milani, A.M. **Nobili**, M. Carpino: Dynamics of Pluto, *Icarus* 82, 200-217, 1989
43. P. Farinella, A.M. **Nobili**, B. Barlier, F. Mignard: Effects of thermal thrust on the node and inclination of LAGEOS, *Astronomy and Astrophysics* 234, 546-554, 1990

44. A.M. **Nobili**, A. Milani, E. Polacco, I.W. Roxburgh, F. Barlier, K. Aksnes, C.W.F. Everitt, P. Farinella, L. Anselmo, Y. Boudon: The Newton Mission - A proposed manmade planetary system in space to measure the gravitational constant, *ESA Journal* 14, 389-408, 1990
45. A.M. **Nobili**, G. Catastini, A. di Virgilio, V. Iafolla, F. Fuligni: Noise attenuators for gravity experiments in space, *Physics Letters A*, 160, 45-54, 1991
46. A. Milani, A.M. **Nobili**: An example of stable chaos in the Solar System, *Nature*, 357, 569-570, 1992
47. D. Bramanti, A.M. **Nobili**, G. Catastini: Test of the Equivalence Principle in a non drag-free spacecraft, *Physics Letters A*, 164, 243-254, 1992
48. G. Catastini, D. Bramanti, A.M. **Nobili**, F. Fuligni, V. Iafolla: Pico Gravity Box (PGB): Efficiency of a passive noise attenuator in space, *ESA Journal*, 16, 401-417, 1992
49. I. Ciufolini, P. Farinella, A.M. **Nobili**, D. Lucchesi, L. Anselmo: Results of a Joint ASI-NASA study on the LAGEOS gravitomeric experiment and the nodal perturbations due to radiation pressure and particle drag effects, *Il Nuovo Cimento* 108B, 151-162, 1993
50. A.M. **Nobili**: Test of the Equivalence Principle in space, *Il Nuovo Cimento* 16C, 789-793, 1993
51. A.M. **Nobili**, D. Bramanti, E. Polacco, G. Catastini, A. Milani, L. Anselmo, M. Andrenucci, S. Marcuccio, G. Genta, C. Delprete, E. Brusa, D. Bassani, G. Vannaroni, M. Dobrowolny, E. Melchioni, C. Arduini, U. Ponzi, G. Laneve, D. Mortari, M. Parisse, F. Curti, F. Cabiati, E. Rossi, A. Sosso, G. Zago, S. Monaco, G. Gori Giorgi, S. Battilotti, L. D'Antonio, G. Amicucci: "Galileo Galilei". Flight experiment on the Equivalence Principle with field emission electric propulsion, *Journal of the Astronautical Sciences*, 43, 219-242, 1995
52. A.M. **Nobili**, D. Bramanti, G. Catastini: "Galileo Galilei" Flight experiment on the equivalence principle with field emission electric propulsion, *Classical and Quantum Gravity* 13, A197-A201, 1996
53. G. Catastini, D. Bramanti, A.M. **Nobili**: "Galileo Galilei" on the Ground (GGG), *Classical and Quantum Gravity*, 13, A193-A196, 1996
54. A. Milani, A.M. **Nobili**, Z. Knezevic: Stable chaos in the asteroid belt, *Icarus*, 13, 13-31, 1997
55. E. M. Standish and A. M. **Nobili**: Galileo's observations of Neptune, *Baltic Astronomy* 6, 97-104, 1997
56. A.M. **Nobili**, D. Bramanti, E. Polacco, G. Catastini, G. Genta, E. Brusa, V.B. Mitrofanov, A. Bernard, P. Touboul, A.J. Cook, J. Hough, I.W. Roxburgh, A. Polnarev, W. Flury, F. Barlier, C. Marchal: Proposed non cryogenic, non drag free test of the equivalence principle in space, *New Astronomy*, 3, 175-218, 1998
57. A.M. **Nobili**, D. Bramanti, E. Polacco, G. Catastini, A. Anselmi, S. Portigliotti, A. Lenti, P. di Giamberardino, S. Monaco, R. Ronchini: Evaluation of a proposed test of the weak equivalence principle using earth-orbiting bodies in high-speed co-rotation: re-establishing the physical bases, *Classical and Quantum Gravity*, 16, 1463-1470, 1999
58. A.M. **Nobili**, D. Bramanti, E. Polacco, I.W. Roxburgh, G.L. Comandi and G. Catastini: "GALILEO GALILEI" (GG) small-satellite project: an alternative to the torsion balance for testing the Equivalence Principle on Earth and in space, *Classical and Quantum Gravity*, 17, 2347-2349, 2000
59. A.M. **Nobili**, D. Bramanti, G.L. Comandi, R. Toncelli, E. Polacco, G. Catastini: Radiometer effect in space missions to test the Equivalence Principle, *Physical Review D, Rapid Communications*, 63, 101101(R), 2001

60. A.M. **Nobili**, D. Bramanti, G.L. Comandi, R. Toncelli, E. Polacco: Radiometer effect in the Microscope space mission, *New Astronomy*, 7, 521-529, 2002
61. A.M. **Nobili**, D. Bramanti, G.L. Comandi, R. Toncelli, E. Polacco: A rotating differential accelerometer for testing the equivalence principle in space: results from laboratory tests of a ground prototype, *New Astronomy*, 8, 371-390, 2003
62. A.M. **Nobili**, D. Bramanti, G.L. Comandi, R. Toncelli, E. Polacco, M.L. Chiofalo: "Galileo Galilei – GG": design, requirements, error budget and significance of the ground prototype", *Physics Letters A*, 318, 172-183, 2003
63. G.L. Comandi, A.M. **Nobili**, D. Bramanti, R. Toncelli, E. Polacco, M.L. Chiofalo: "Galileo Galilei on the Ground – GGG": experimental results and perspectives, *Physics Letters A*, 318, 213-222, 2003
64. G.L. Comandi, A.M. **Nobili**, R. Toncelli, M.L. Chiofalo: Tidal effect in space experiments to test the equivalence principle: implications on the experiment design, *Physics Letters A*, 318, 251-269, 2003
65. G.L. Comandi, M.L. Chiofalo, R. Toncelli, D. Bramanti, E. Polacco and A.M. **Nobili**: Dynamical Response of the Galileo Galilei rotor for a Ground test of the Equivalence Principle: theory, simulation and experiment. Part I: the normal modes, *Review of Scientific Instruments*, 77, 034501(1-15), 2006
66. G.L. Comandi, R. Toncelli, M.L. Chiofalo, D. Bramanti and A.M. **Nobili**: Dynamical Response of the Galileo Galilei rotor for a Ground test of the Equivalence Principle: theory, simulation and experiment. Part II: the rejection behavior, *Review of Scientific Instruments*, 77, 034502(1-10), 2006
67. A.M. **Nobili**, G.L. Comandi, S. Doravari, F. Maccarrone, D. Bramanti, E. Polacco: Experimental validation of a high accuracy test of the Equivalence Principle with small satellite "Galileo Galilei-GG", *International Journal of Modern Physics D*, 16, 2259-2270, 2007
68. A.M. **Nobili**, G.L. Comandi, D. Bramanti, S. Doravari, D. Lucchesi, F. Maccarrone: Limitations to testing the equivalence principle with satellite laser ranging, *General Relativity and Gravitation*, 40, 1533-1544, 2008
69. A.M. **Nobili**, G.L. Comandi, S. Doravari, D. Bramanti, R. Kumar, F. Maccarrone, E. Polacco, S. G. Turyshev, M. Shao, J. Lipa, H. Dittus, C. Laemmerzhall, A. Peters, J. Mueller, C. S. Unnikrishnan, I. W. Roxburgh, A. Brillet, C. Marchal, J. Luo, J. van der Ha, V. Milyukov, V. Iafolla, D. Lucchesi, P. Tortora, P. De Bernardis, F. Palmonari, S. Focardi, D. Zanello, S. Monaco, G. Mengali, L. Anselmo, L. Iorio & Z. Knezevic: "Galileo Galilei" (GG) a small satellite to test the equivalence principle of Galileo, Newton and Einstein, *Exp Astron.* 23, 689-710, 2009
70. A.M. **Nobili**: Equivalence Principle test in space, *Il Nuovo Saggiatore* 26, 18-27, 2010
71. R. Pegna, A.M. **Nobili**, M. Shao, S.G. Turyshev, G. Catastini, A. Anselmi, R. Spero, S. Doravari, G.L. Comandi, A. De Michele: Abatement of thermal noise due to Internal damping in 2D oscillators with rapidly rotating test masses, *Phys. Rev. Lett.* 107, 200801-5, 2011
72. A. M. **Nobili**, M. Shao, R. Pegna, G. Zavattini, S. G. Turyshev, D. M. Lucchesi, A. De Michele, S. Doravari, G. L. Comandi, T. R. Saravanan, F. Palmonari, G. Catastini, A. Anselmi: "Galileo Galilei" (GG): space test of the weak Equivalence Principle to  $10^{-17}$  and laboratory demonstrations, *Class. Quantum Grav.* 29, 184011-19, 2012

73. **A. M. Nobili**, D. M. Lucchesi, M. T. Crosta, M. Shao, S. G. Turyshev, R. Peron, G. Catastini, A. Anselmi, G. Zavattini: On the universality of free fall, the equivalence principle and the gravitational redshift, *Am. J. Phys.* **81**, 527-536, 2013
74. **A. M. Nobili**, R. Pegna, M. Shao, S. G. Turyshev, G. Catastini, A. Anselmi, R. Spero, S. Doravari, G. L. Comandi, D. M. Lucchesi, A. De Michele: Integration time in space experiments to test the equivalence principle, *Phys. Rev. D* **89**, 042005(7), 2014
75. **A. M. Nobili**: Fundamental limitations to high-precision tests of the universality of free fall by dropping atoms, *Phys. Rev. A* **93**, 023617, 2016
76. **A. M. Nobili**: Do general relativistic effects limit experiments to test the universality of free fall and the weak equivalence principle?, *Phys. Rev. D* **94**, 124047, 2016

- ANNA M. **NOBILI**: BOOKS

1. Andrea Milani, Anna M **Nobili**, Paolo Farinella: Non gravitational perturbations and satellite geodesy, Adam Hilger Ltd, Bristol and Boston, 1987

- ANNA M. **NOBILI**: REVIEWS (R), PAPERS (P) AND COMMUNICATIONS (C)  
PRESENTED AT INTERNATIONAL CONFERENCES

1. (c) P.Farinella, A.M. **Nobili**: Hill's stability applied to the asteroidal belt, in *Instabilities in Dynamical Systems* (V.Szebehely ed.), 298, Reidel Pu. Co., Dordrecht, 1979
2. (c) B.Bertotti, R.Bevilacqua, P.Farinella, P.Gianni, A.Milani A.M. **Nobili**: Determination of the geopotential's resonant coefficients by laser tracking of a synchronous satellite, in *Atti del 4° Convegno Nazionale di Relatività Generale e Fisica della Gravitazione*, Tecnoprint, Bologna, 163-164, 1981
3. (p) F.Ferrini, A.Milani, A.M. **Nobili**: On the shape of Amalthea, *Advanced Space Research (Cospar)* 1, 191-197, 1981
4. (c) P.Farinella, A.Milani, A.M. **Nobili**: A method to measure the gravitational constant in an orbiting laboratory, in *Atti del 3° Convegno Nazionale di Relatività e Fisica della Gravitazione*, Accademia delle Scienze di Torino, 225-227, 1981
5. (p) P.Farinella, A.Milani, A.M. **Nobili**, F.Sacerdote: Dynamics of an artificial satellite in an Earth-fixed reference frame: effects of polar motions, in *Reference Coordinate Systems for Earth Dynamics* (E.M.Gaposchkin B.Kolaczek eds.), 271-274, Reidel Pu. Co.,Dordrecht, 1981
6. (p) L.Anselmo, P.Farinella, A.Milani, A.M. **Nobili**: Modelling of orbital perturbations due to radiation pressure for high Earth satellites, in *Proceedings of the International Symposium on Spacecraft Flight Dynamics* (ESA SP-160),47-52, 1981
7. (c) S.Catalano, P.Farinella, A.Milani, A.M. **Nobili**: Optical tracking of synchronous satellites for geophysical purposes, in *Sun and Planetary System* (W.Fricke and G. Teleki eds.), 199-200, Reidel Pu.Co.,Dordrecht, 1982

8. (c) P.Farinella, A.Milani, A.M. **Nobili**: High precision tracking of geosynchronous satellites: oceanographic applicatios, in Sun and Planetary System (W.Fricke and G.Teleki eds.), 199-200, Reidel Pu.Co.,Dordrecht, 1982
9. (r) L.Anselmo, B.Bertotti, P.Farinella, A.Milani, A.M. **Nobili**, F.Sacerdote: High precision tracking of synchronous satellites for geophysical purposes, in The Comparative Study of the Planets (A.Coradini and M.Fulchignoni eds.), 195-202, Reidel Pu.Co.,Dordrecht, 1982
10. (r) P.Farinella, F.Ferrini, A.Milani, A.M. **Nobili**, P.Paolicchi V.Zappalà: The shape of small solar system bodies: gravitational equilibrium vs. solid-state interactions, in The Comparative Study of the Planets (A.Coradini and M.Fulchignoni eds.),71-77, Reidel Pu. Co., Dordrecht, 1982
11. (c) P.Farinella, A.Milani, A.M. **Nobili**, F.Sacerdote: Reference systems linkage from space, in Sun and Planetary System (W.Fricke and G.Teleki eds.), Reidel Pu. Co.,Dordrecht, 197-198, 1982
12. (r) A.Milani, A.M. **Nobili**: On topological stability in the general 3 and 4-body problem, in Dynamical Trapping in the Solar System (Markellos and Kozai eds.), Reidel Pu. Co., Dordrecht, 301-315, 1983
13. (c) P.Farinella, A.Milani, A.M. **Nobili**, P.Paolicchi V.Zappalà: The shape of the small bodies of the solar system: a comparative view, in Figure of the Earth, the Moon and Other Planets (P.Holota, ed.), Prague, 435-438, 1983
14. (p) A.Milani, A.M. **Nobili**: Dynamical instabilities in the outer asteroid belt, in Asteroids, Comets, Meteors, (Rickman Lagerqvist eds.), Uppsala Univ. Press, 127-135, 1983
15. (c) B.Bertotti, P.Farinella, A.Milani, A.M. **Nobili**, F.Sacerdote: Linking reference systems from space, in The F.A.S.T Thinkshop (Bernacca ed), Padova, 403-404, 1983
16. (c) P. Farinella, A. Milani, A.M. **Nobili**, P. Paolicchi: Tidal breakup and origin of the uranian ring system, in Planetary rings, A. Brahic ed., 1984
17. (r) A.Milani A.M. **Nobili**: On the stability of the solar system as hierarchical dynamical system, in The Big Bang and George Lemaitre, 219-230, Reidel Pu. Co., 1984
18. (p) A.Milani, A.M. **Nobili**: Errors in numerical integrations and chaotic motions, in Dynamics of Comets, Carusi and Valsecchi eds., Reidel Pu. Co., 215-226, 1985
19. (r) A.Milani, A.M. **Nobili**: Methods of stability analysis in the solar system, in Stability of the Solar System and its Natural and Artificial Bodies, V. Szebehely ed., 139-150, Reidel Pu. Co., 1985
20. (c) M.Carpino, P.Farinella, A.Milani, A.M. **Nobili**: The changing geopotential and LAGEOS, in Proceedings of the international Symposium on Space Techniques for Geodynamics, Sopron, Hungary, 2, 33-42, 1985
21. (c) M.Carpino, P.Farinella, A.Milani, A.M. **Nobili**, F.Sacerdote: Determination of a local network from satellite laser ranging: problems and perspectives, in Proceedings of the International Symposium on Space Techiques for Geodynamics, Sopron, Hungary, 2, 53-59, 1985
22. (r) P.Farinella, A.Milani, A.M. **Nobili**, P.Paolicchi, V.Zappalà: The shapes and strengths of small icy satellites, in Ices in the Solar System, J. Klinger et al. eds., 699-710, Reidel Pu. Co., 1985
23. (p) A.M. **Nobili**: LONGSTOP and the masses of Uranus and Neptune, in The Solid Bodies of the Outer Solar System ESA-SP 2421, 115-119, 1986
24. (p) A.M. **Nobili**, I.W.Roxburgh: Simulation of general relativistic corrections in long term numerical integrations of planetary orbits, in Relativity in Celestial Mechanics and Astrometry, 105- 111, Reidel Pu. Co., 1986

25. (p) A.Milani, C.D.Murray, A.M. **Nobili**: The Hilda group and the Hecuba gap, in Asteroids, Comets and Meteors II, (Lagerkvist, and Rickman eds.), Uppsala Univ. press, 147-151, 1986
26. (c) P.Farinella, A.Milani, A.M. **Nobili**: Giuseppe Colombo - a remembrance, in Stability of the Solar System and its Minor Natural and Artificial Bodies (V.Szebehely ed), xiii-xv, Reidel Pu. Co., Dordrecht, 1985
27. (r) A.M. **Nobili**: Long term dynamics of the outer solar system. Review of LONGSTOP project, in The Few Body Problem, M.J. Valtonen ed., Kluwer Academic Pu., 147-163, 1988
28. (r) A.M. **Nobili**, A. Milani: Long term energy variations and a 31 Myr effect in the orbits of the outer planets, in Resonances in the Solar System, Proceedings 10th European Regional Astronomy Meeting of the IAU, M. Sidlichowsky ed., Vol. 3, 77-87, 1987
29. (a) A.M. **Nobili**: The accumulation of integration error, in Long Term Behaviour of Natural and Artificial N-Body Systems, (A.E. Roy ed.), NATO-ASI Cortina 1987, Kluwer Academic Pu., 109-117, 1988
30. (p) A.M. **Nobili**: Testing newtonian gravity: An experiment of basic physics in space, in Physics and Astrophysics in the Space Statio Era, (P.L. Bernacca and R. Ruffini eds.), Società Italiana di Fisica, Conference Proceedings Vol. 17, 117-129, 1989
31. (p) A.M. **Nobili**, A.Milani: Testing newtonian gravity in space: A null 3-body experiment, in Fifth force and neutrino physics, Fackler and Tran Thanh Van eds., Edition Frontieres, 569-576, 1988
32. (r) A.M. **Nobili**: Verifica sperimentale del principio di equivalenza da Galileo ad oggi, in Atti del Workshop su G e g, Centro di Astrodinamica G. Colombo, Torino, 70-79, 1988
33. (r) A.M. **Nobili**: Dynamics of the outer asteroid belt, in Asteroids II, (R. Binzel, T. Gehrels and M.S. Matthews Eds.), University of Arizona press, 862-879, 1989
34. (r) A.M. **Nobili**, D. Bramanti, E. Polacco, G. Catastini, A. Milani, L. Anselmo, M. Andrenucci, S. Marcuccio, A. Genovese, G. Genta, C. Delprete, E. Brusa, D. Bassani, G. Vannaroni, M. Dobrowolny, E. Melchioni, C. Arduini, U. Ponzi, G. Laneve, D. Mortari, M. Parisse, F. Curti, F. Cabiati, E. Rossi, A. Sosso, G. Zago, S. Monaco, G. Gori Giorgi, S. Battilotti, L. D'Antonio, G. Amicucci: "Galileo Galilei". Flight Experiment on the Equivalence Principle with Field Emission Electric Propulsion. GG-FEEP<sup>2</sup>, In "Small and Medium Size Italian Scientific Satellites", Tremezzo 13-15 June, 1994, Antonello Ed., Centro Stampa dell' Area di Ricerca del CNR di Milano, 19-29, 1994
35. (p) D. Lucchesi, A.M. **Nobili**: Dynamics of 12-h Earth satellites, Proceedings of the Workshop "Accurate Orbit Determination and Observations of High Earth satellites for Geodynamics", A. Elife and P. Paquet Eds., Conseil de l'Europe, Cahiers du Centre Européen de Géodynamique et de Sèismologie, Vol 10, p. 85, 1995
36. (p) F. Blesa, G. Catastini, A.M. **Nobili**: Medium arc analysis of ETALON data with ORBIT10, Proceedings of the Workshop "Accurate Orbit Determination and Observations of High Earth satellites for Geodynamics" A. Elife and P. Paquet Eds., Conseil de l'Europe, Cahiers du Centre Européen de Géodynamique et de Sèismologie, Vol 10, p. 49, 1995
37. (r) A.M. **Nobili**: A brief history of the COGEOS research project, Proceedings of the Workshop "Accurate Orbit Determination and Observations of High Earth satellites for Geodynamics" A. Elife and P. Paquet Eds., Conseil de l'Europe, Cahiers du Centre Européen de Géodynamique et de Sèismologie, Vol 10, p. 1, 1995
38. (p) G. Catastini, F. Blesa, A.M. **Nobili**, A. Rossi: Analysis of ESOC Range Data to METEOSAT Satellites, Proceedings of the Workshop "Accurate Orbit Determination and

- Observations of High Earth satellites for Geodynamics" A. Elife and P. Paquet Eds., Conseil de l'Europe, Cahiers du Centre Européen de Géodynamique et de Sèismologie, Vol 10, p. 55, 1995
39. (c) A.M. **Nobili**, G. Catastini, D. Bramanti: Pico Gravity Box: A Facility for Microgravity and Fundamental Physics, in Small Mission Opportunity and the Scientific Community, Proceedings, FIAT-BPD Difesa e Spazio, 2-144/147, 1995
  40. (c) A.M. **Nobili**, D. Bramanti, G. Catastini: GALILEO GALILEI: Small Satellite Mission in Fundamental Physics with FEED Thrusters, in Small Mission Opportunity and the Scientific Community, Proceedings, FIAT-BPD Difesa e Spazio, 2-100/107, 1995
  41. (c) G. Catastini and A.M. **Nobili**: ODF: An Optical Drag-Free Small Satellite for Geodesy and Fundamental Physics, in Small Mission Opportunity and the Scientific Community, Proceedings, FIAT-BPD Difesa e Spazio, 2-138/143, 1995
  42. (p) A.M. **Nobili**, D. Bramanti, G. Catastini, A. Anselmi, S. Portigliotti, A. Lenti, G. Volpi, S. Marcuccio: GG-Experience en vol sur le principe d'equivalence avec propulsion electric par emission de champ; GALILEO GALILEI (GG)-Test of the Equivalence Principle with a Small Spinning Spacecraft: The Stabilization of its Weakly Coupled Masses, in Scientific Satellites Achievements and Prospects in Europe, Proceedings, AAF-ESA, 3-74/89, 1996
  43. (r) A.M. **Nobili**, D. Bramanti, G. Catastini, E. Polacco, A. Anselmi, S. Portigliotti, A. Lenti: "Galileo Galilei" (GG): A Small Satellite for a High Accuracy Test of the Equivalence Principle, 48th International Astronautical Congress, Turin, Italy, IAA-97-IAA.11.3.01, 1997
  44. (r) A.M. **Nobili**, D. Bramanti, G. Catastini: "Galileo Galilei": A Small Satellite for a High Accuracy Test of the Equivalence Principle, in General Relativity and Gravitational Physics, M. Bassan et al Eds., Word Scientific Press 227-237, 1997
  45. (p) A. M. **Nobili**, D. Bramanti, G. Catastini: "The GALILEO GALILEI Small Satellite Mission with FEED Thrusters (GG)", Il Nuovo Cimento C, **20**, 651-656, 1997
  46. (p) A.M. **Nobili**, D. Bramanti, E. Polacco, I.W. Roxburgh, G. Comandi, A. Anselmi, G. Catastini, A. Lenti and A. Severi: "GALILEO GALILEI" (GG). Proposed Space Experiment to Test the Equivalence Principle and Preliminary Results from the Prototype on the Ground, in Proceedings of 1999 NASA/JPL Conference on "Fundamental Physics in Space", April 29, 30 and May 1, Washington DC, NASA Document D-18925, 309-327
  47. (p) A.M. **Nobili**, D. Bramanti, E. Polacco, G. Catastini, A. Anselmi, S. Portigliotti, A. Lenti, A. Severi, "The Galileo Galilei (GG) Project: Testing The Equivalence Principle In Space And On Earth, COSPAR, July 1998, Advances in Space Research, 25, 1231-1235 (2000)
  48. (r) A.M. **Nobili**: gravitation measurements on Earth and in space: Tests of the Equivalence Principle, in Proceedings of the International School of Physics "Enrico Fermi" Course CXLVI *Recent Advances in Metrology and Fundamental Constants*, Eds. T.J. Quinn, S. Leschiutta and P. Tavella, IOS Press, Amsterdam, pp. 609-652, 2001
  49. (p) A.M. **Nobili**, D. Bramanti, G.L. Comandi, R. Toncelli, E. Polacco, M.L. Chiofalo: The fast rotating "GGG" differential accelerometer for testing the equivalence principle: current state and analysis of seismic disturbances, in Proceedings of the XXXVIIIth Rencontres de Moriond "Gravitational Waves and Experimental Gravity", J. Dumarchez and J. Tran Thanh Van Eds., The Gioi Publishers, Vietnam, pp. 371-376, 2003
  50. (r) A. M. **Nobili**, G. L. Comandi, R. Pegna, D. Bramanti, S. Doravari, F. Maccarrone and D. M. Lucchesi: Testing the Weak Equivalence Principle, Proceedings of IAU Symposium No.



- 261, 2009, Relativity in Fundamnetal Astronomy, S. A. Klioner, P. K. Seidelman & M. H. Soffel, eds., Cambridge University press 5, S261 pp. 390-401, 2010
51. (p) **A. M. Nobili**, R. Pegna, G. Catastini, A. Anselmi, A. De Michele, D. M. Lucchesi: Major challenges of a high precision test of the equivalence principle in space, in Proceedings of 46th Rencontres de Moriond and GPhyS Colloquium, “2011 Gravitational Waves and Experimental Gravity”, E. Augé, J. Dumarchez and J. Tran Thanh Van Eds, The GIOI Pblishers, Vietnam, pp. 341-346, 2011
52. (r) **A. M. Nobili**: Galileo Galilei (GG) space test of the weak equivalence principle to  $10^{-17}$ : the key features, in Proceedings of “CPT13: 6<sup>th</sup> Meeting on CPT and Lorentz Symmetry”, Indiana University, Bloomington June 17-21, 2013, World Scientific, ISBN: 978-981-4566-42-1, 2013
53. (r) **A. M. Nobili**: Testing the weak equivalence principle with macroscopic proof masses on ground and in space: A brief review: “International Workshop on Antimatter and Gravity”, Albert Einstein Center for Fundamental Physics, University of Bern, 13-15 November 2013, International Journal of Modern Physics: Conference Series **30**, 1460254(9), 2014
54. (p) M. Pisani, G. Mana and **A. M. Nobili**: Design of an interferometric displacement sensor with picometer resolution for the Galileo Galilei mission, IEEE Conference Publications, Metrology for Aerospace (MetroAeroSpace), IEEE 978-1-4799-7569-3/15, pp. 591-595 DOI: 10.1109/MetroAeroSpace.2015.7180724, 2015