CURRICULUM VITAE

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Director, Center for Relativity (1987 –)
B.S.: University of Notre Dame, Physics (June 1963)
Ph.D.: University of Maryland, 1963–1967, Physics (August 1967).
Title of Ph.D. Dissertation: "Almost Symmetric Spaces and Gravitational Radiation"

Experience:

a. National Science Foundation Pre-doctoral Fellow, University of Maryland, 1963–1967.
b. Physicist (GS 7), Naval Research Laboratory, Washington, D.C., Summer 1964.
c. National Science Foundation Faculty Associate, The University of Texas at Austin, 1967–1969.
d. Assistant Professor, The University of Texas at Austin, 1969–1973.
e. Visiting Research Fellow, Wesleyan University, 1969–1970.
f. Member of expeditionary team to Mauritania, June-July 1973.
g. Associate Professor, The University of Texas at Austin, 1973–1980.
h. Stanford-NASA ASEE Summer Research Fellow, Summer 1977, 1978.
i. PROFESSOR OF PHYSICS, The University of Texas at Austin, September 1980–
j. Visiting Professor, Astrophysics Department, Oxford University, 1981–1982.
k. DIRECTOR, CENTER FOR RELATIVITY, University of Texas at Austin, 1987–
l. Lead Principal Investigator, The Binary Black Hole Grand Challenge Alliance, 1993–1999
m. Orson Anderson Scholar, Los Alamos National Laboratory, September 1996–May 1997.

Honors:

Honorable Mention (with J. Barrow), Gravity Essay Competition, 1977.
First Prize (shared), Fall 1978 McDonald Observatory News Popular ScienceWriting Contest.
Honorable Mention, Gravity Essay Competition, 1980.
Honorable Mention (with B. Tolman), Gravity Essay Competition, 1982.
University Medal, Helsinki University, March 15, 1982.
University Silver Medal, Universidad Nacional Autonoma de Mexico, awarded December 4, 1990, Cocoyoc, Mexico.

Member of Professional Societies:

Fellow[1], American Physical Society
Foreign member, Accademia delle Scienze di Torino (Academy of Sciences of Turin)
American Association for Advancement of Science
International Astronomical Union
International Society on General Relativity and Gravitation
(Member, Nominating Committee, 1989–1995; Auditor, 2001–2006)
American Geophysical Union
Dictionary Society of North America
American Astronomical Society

National/International Committee Service:

National Research Council Air Force Studies Board Committee on Accuracy of Time Transfer in Satellite Systems, July 1984–July 1986.

[1]Citation: "For his analysis in general relativity of a wide range of astrophysical phenomena, especially his numerical simulations of strong-field gravitational systems and the gravitational radiation they produce."

Subcommittee of Oversight Review Committee for the National Science Foundation Gravitational Physics Program, January 1988– .
National Aeronautics and Space Administration Science Coordinating Committee for Experimental Gravitation, September 1988– .
National Research Council Astronomy and Astrophysics Survey Computing and Data Processing Panel, June 1989–1991.
Co-organizer (with J. York and T. Piran), Aspen Workshop on Relativity, Summer 1990.
NRC/NAS/NSF Graduate Fellowship Program Evaluation Panel, 1991, 1993.
San Diego Supercomputer Center/NPACI Allocation Committee, 1992–1999.
San Diego Supercomputer Center/NSF Grand Challenge (MetaCenter) Computer Allocation Committee, 1993–1999.
National Aeronautics and Space Administration Ultraviolet/Visible and Gravitation Astrophysics Branch Program Review Panel, 1993.
National Science Foundation Physics Subcommittee of the Advisory Committee for Mathematical and Physical Sciences, 1993– .
National Science Foundation Physics Division Director Recruitment Committee, 1994.
European Space Agency LISA Theory Working Group, 1994.
Member, Editorial Board, Computers in Physics, 1988–1991.
Member, Advisory Committee, Computers in Physics, 1992–1995.
Member, International Advisory Committee, International Conference on GravitationalWaves: Sources and Detections (Pisa, Italy, March 19-23, 1996).
Member, Organizing Committee, 15th International Conference on Gravitation and General Relativity (Pune, India, 1997).
Member, Scientific Advisory Board (Fachbeirat) at the Max-Planck-Institut f¨ur Gravitationsphysik (Potsdam, Germany, 1996–2006); Member of the subcommittee on the GEO600 gravitational wave detector at Hannover, Germany (2003–2006).
Science Advisor and Member of Review Committee for Earth & Sky[2] 1997– .
Los Alamos Institute for Geophysics and Planetary Physics External Advisory Committee, 1997.
Integration/Partnership Working Group Member, DOE/NSF Workshop on Advanced Scientific Computation (National Academy of Sciences, Washington, DC, July 30-31, 1998).
Member, LARES (Laser Relativity Satellite) Italian Space Agency Phase A Study Team (1998).
Member, Scientific Organizing Committee, SIGRAV Graduate School in Contemporary Relativity
and Gravitational Physics, Centro di Cultura “A. Volta,” Villa Olmo, Como (Italy, 1998–).
CHAIR, Department of Energy Review Team, Chicago ASCI Center on Astrophysical Flashes (University of Chicago, October 19-20, 1998).
Lead Judge (Southwestern Region), Siemens Westinghouse Science and Technology Competition, 1999–2006, 2008.
Member, Local Organizing Committee, 20th Texas Symposium on Relativistic Astrophysics (Austin, TX, Dec 2000).
Member, LIGO Program Advisory Committee, 2001–2006. CHAIR 2003–2004 .

[2]Earth & Sky is a daily radio program produced by Byrd & Block Communications, Inc. of Austin, Texas, with major funding from the National Science Foundation’s Informal Science Education program. The show is heard on over 950 commercial and public radio stations and their translators in the United States.

Member, Internal Review Committee, NASA–Ames/Stanford University, Center for Turbulence Research, 2001– .
Member, Internal Review Committee, Astrophysics Division, Goddard Space Flight Center, 2003– .
Member, Editorial Advisory Board, American Journal of Physics, 2004–2008 .
Member, Department of Energy Review Committee on High Performance Computing at Oak Ridge National Laboratory, 2004.
Member, Department of Energy Leadership Class Computing Capability for Science Review, Washington D.C. 2004.
Member, NASA Astrophysics Theory Program/Beyond Einstein Foundation Science Proposal Review, Washington D.C. 2004.
CHAIR, Organizing Committee, Institute for Pure and Applied Mathematics PCA Workshop III: "Relativistic Astrophysics", May 2-6, 2005 Institute for Pure and Applied Mathematics (IPAM, UCLA), Los Angeles California.
CoDirector (with I. Ciufolini) of International School on Astrophysical Relativity "John Archibald Wheeler" (Erice Italy); CoDirector of Course "Developments of 50 years in Astrophysical Relativity: Frame-dragging, Gravitational-waves and Gravitational Tests" (Erice Italy, 31 May - 8 June 2006); CoDirector of Course "Frontiers in Numerical Gravitational Astrophysics" (Erice Italy, June 27-July 5, 2008).
Member, Organizing Committee, 11th Marcel Grossmann Meeting on General Relativity (July 23-29, 2006; Freie Universitaet Berlin, Germany)
Member, Organizing Committee, 12th Marcel Grossmann Meeting on General Relativity (July 12-18, 2009; UNESCO Headquarters, Paris, France)
Member, Organizing Committee, First International LARES Workshop (3-4 July 2009; Sapienza, Universita' di Roma, Scuola di Ingegneria Aerospaziale)
Asociate Editor, European Physics Journal Plus (an all electronic journal) 2010 – .
Member, NSF/NASA/DOE Astronomy and Astrophysics Advisory Committee, 2011 – .
(This is a committee created by Federal law that advises the three agencies on their large astronomical and astrophysical projects both ground based and space based.)

Selected Refereed Publications and Papers in Preparation since 2008:
1. "First joint search for gravitational-wave bursts in LIGO and GEO600 data" (The LIGO-Virgo Collaboration: Abbott et al.; 447 authors including Richard A. Matzner) *Classical and Quantum Gravity* **25** 245008 (2008). [arXiv:0807.2834].
2. "Search for Gravitational-Wave Bursts from Soft Gamma Repeaters" (The LIGO-Virgo Collaboration: Abbott et al.; 447 authors including Richard A. Matzner) *Physical Review Letters* **101** 211102 (2008).
3. "All-Sky LIGO Search for Periodic GravitationalWaves in the Early Fifth-Science-Run Data" (The LIGO-Virgo Collaboration: Abbott et al.; 466 authors including Richard A. Matzner) *Physical Review Letters* **102** 111102 (2009). [arXiv:0810.0283].
4. "Multipole Analysis of Kicks in Collision of Spinning Binary Black Holes" (Sarah H. Miller and Richard A. Matzner) *General Relativity and Gravitation*, **41** Issue3 525 (2009), (DOI 10.1007/s10714-008-0682-9 August 31, 2008). [arXiv:0807.3028].
5. "Superkicks in Hyperbolic Encounters of Binary Black Holes" (James Healy, Frank Herrmann, Ian Hinder, Deirdre M. Shoemaker, Pablo Laguna, Richard A. Matzner) *Physical Review Letters* **102** 041101 (2009) [arXiv:0807.3292].
6. "Testing gravitational-wave searches with numerical relativity waveforms: Results from the first Numerical INJection Analysis (NINJA) project" (Benjamin Aylott, John G. Baker, William D. Boggs, Michael Boyle, Patrick R. Brady, Duncan A. Brown, Bernd Brgmann, Luisa T. Buchman, Alessandra Buonanno, Laura Cadonati, Jordan Camp, Manuela Campanelli, Joan Centrella, Shourov Chatterji, Nelson Christensen, Tony Chu, Peter Diener, Nils

Dorband, Zachariah B. Etienne, Joshua Faber, Stephen Fairhurst, Benjamin Farr, Sebastian Fischetti, Gianluca Guidi, Lisa M. Goggin, Mark Hannam, Frank Herrmann, Ian Hinder, Sascha Husa, Vicky Kalogera, Drew Keppel, Lawrence E. Kidder, Bernard J. Kelly, Badri Krishnan, Pablo Laguna, Carlos O. Lousto, Ilya Mandel, Pedro Marronetti, Richard Matzner, Sean T. McWilliams, Keith D. Matthews, R. Adam Mercer, Satyanarayan R. P. Mohapatra, Abdul H. Mrou, Hiroyuki Nakano, Evan Ochsner, Yi Pan, Larne Pekowsky, Harald Pfeiffer, Denis Pollney, Frans Pretorius, Vivien Raymond, Christian Reisswig, Luciano Rezzolla, Oliver Rinne, Christian Rover, Lucia Santamara, Bangalore Sathyaprakash, Mark Scheel, Erik Schnetter, Jennifer Seiler, Stuart Shapiro, Deirdre Shoemaker, Ulrich Sperhake, Alexander Stroeer, Riccardo Sturani, Wolfgang Tichy, Yuk Tung Liu, Marc van der Sluys, James van Meter, Ruslan Vaulin, Alberto Vecchio, John Veitch, Andrea Vicere, John Whelan, Yosef Zlochower), *Classical and Quantum Gravity* **26** 165008 (2009).[arXiv:0901.4399].
7. "Search for Gravitational Waves from Low Mass Binary Coalescences in the First Year of LIGO's S5 Data" (The LIGO-Virgo Collaboration: Abbott et al.; 506 authors including Richard A. Matzner) *Physical Review* **D79** 122001 (2009). [arXiv:0901.0302].
8. "Search for gravitational-wave bursts in the first year of the fifth LIGO science run" (The LIGO-Virgo Collaboration: Abbott et al.; 502 authors including Richard A. Matzner) *Physical Review* **D80** 102001 (2009). [arXiv:0905.0020v2].
9. "Einstein@Home search for periodic gravitational waves in LIGO S4 data" (The LIGO-Virgo Collaboration: Abbott et al.; 447 authors including Richard A. Matzner) Physical Review **D79** 022001 (2009). [arXiv:0804.1747].
10. "Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data" (The LIGO-Virgo Collaboration: Abbott et al.; 503 authors including Richard A. Matzner) Physical Review **D80** 062001 (2009). [arXiv:0905.1654].
11. "Einstein@Home search for periodic gravitational waves in early S5 LIGO data" (The LIGO-Virgo Collaboration: Abbott et al.; 504 authors including Richard A. Matzner) *Physical Review* **D80** 042003 (2009). [arXiv:0905.1705].
12. "First LIGO search for gravitational wave bursts from cosmic (super)strings" (The LIGO-Virgo Collaboration: Abbott et al.; 503 authors including Richard A. Matzner) *Physical Review* **D80** 062002 (2009). [arXiv:0904.4718].
13. "Search for High Frequency Gravitational Wave Bursts in the First Calendar Year of LIGO's Fifth Science Run" (The LIGO-Virgo Collaboration: Abbott et al.; 504 authors including Richard A. Matzner) *Physical Review* **D80** 102002 (2009) [arXiv:0904.4910].
14. "Search for Gravitational Waves from Low Mass Compact Binary Coalescence in 186 Days of LIGO's fifth Science Run" (The LIGO-Virgo Collaboration: Abbott et al.; 505 authors including Richard A. Matzner) *Physical Review* **D80** 047101 (2009) [arXiv:0905.3710].
15. "Status of NINJA: the Numerical INJection Analysis project" (Cadonati, Laura; Aylott, Benjamin; Baker, John G.; Boggs, William D.; Boyle, Michael; Brady, Patrick R.; Brown, Duncan A.; Brgmann, Bernd; Buchman, Luisa T.; Buonanno, Alessandra; Camp, Jordan; Campanelli, Manuela; Centrella, Joan; Chatterji, Shourov; Christensen, Nelson; Chu, Tony; Diener, Peter; Dorband, Nils; Etienne, Zachariah B.; Faber, Joshua; Fairhurst, Stephen; Farr, Benjamin; Fischetti, Sebastian; Guidi, Gianluca; Goggin, Lisa M.; Hannam, Mark; Herrmann, Frank; Hinder, Ian; Husa, Sascha; Kalogera, Vicky; Keppel, Drew; Kidder, Lawrence E.; Kelly, Bernard J.; Krishnan, Badri; Laguna, Pablo; Lousto, Carlos O.; Mandel, Ilya; Marronetti, Pedro; Matzner, Richard; McWilliams, Sean T.; Matthews, Keith D.; Mercer, R. Adam; Mohapatra, Satyanarayan R. P.; Mrou, Abdul H.; Nakano, Hiroyuki; Ochsner, Evan; Pan, Yi; Pekowsky, Larne; Pfeiffer, Harald P.; Pollney, Denis; Pretorius, Frans; Raymond, Vivien; Reisswig, Christian; Rezzolla, Luciano; Rinne, Oliver; Robinson, Craig; Rver, Christian; Santamara, Luca; Sathyaprakash, Bangalore; Scheel, Mark A.; Schnetter, Erik; Seiler, Jennifer; Shapiro, Stuart L.; Shoemaker, Deirdre; Sperhake, Ulrich; Stroeer, Alexander; Sturani, Riccardo; Tichy, Wolfgang; Liu, Yuk Tung; van der Sluys, Marc; van Meter,

James R.; Vaulin, Ruslan; Vecchio, Alberto; Veitch, John; Vicer, Andrea; Whelan, John T.; Zlochower, Yosef) *Classical and Quantum Gravity* **26** Issue 11, pp. 114008 (June 2009) IOP DOI: 10.1088/0264-9381/26/11/114008[arXiv:0905.4227] (2009).
16. "Final Mass and Spin of Merged Black Holes and the Golden Black Hole" James Healy, Pablo Laguna, Richard A. Matzner, Deirdre M. Shoemaker, *Physical Review* **D81** (Rapid Communication)(No.8) (electronic publication 8 April, 2010) DOI: 10.1103/PhysRevD.81.081501, http://link.aps.org/doi/10.1103/PhysRevD.81.081501 [arXiv:0905.3914].
17. "LIGO: the Laser Interferometer Gravitational-Wave Observatory" (The LIGO-Virgo Collaboration:Abbott et al.; 501 authors including Richard A. Matzner) *Reports on Progress in Physics* **72** 076901 (July 2009). IOP DOI: 10.1088/0034-4885/72/7/076901 [arXiv:0711.3041].
18. "Observation of a kilogram-scale oscillator near its quantum ground state" (The LIGO-Virgo Collaboration: Abbott et al.; 445 authors including Richard A. Matzner) *New Journal of Physics* **11** Issue 7, pp. 073032 (July 2009). DOI 10.1088/1367-2630/11/7/073032.
19. "Stacked Search for Gravitational Waves from the 2006 SGR 1900+14 Storm" (The LIGOVirgo Collaboration: Abbott et al.; 504 authors including Richard A. Matzner) *Astrophysical Journal Letters* **701** L68-L74 (Aug 2009) DOI /0004-637X/701/2/L68. [arXiv:0905.0005].
20. "An upper limit on the stochastic gravitational-wave background of cosmological origin" (The LIGO-Virgo Collaboration: Abbott et al.; 656 authors including Richard A. Matzner) *Nature* **460** 990 (2009).
21. "Search for gravitational-wave bursts associated with gamma-ray bursts using data from LIGO Science Run 5 and Virgo Science Run 1" (The LIGO-Virgo Collaboration: Abbott et al.; 668 authors including Richard A. Matzner) *Astrophysical Journal* **715** 1438-1452 (2010) [arXiv:0908.3824].
22. "Searches for gravitational waves from known pulsars with S5 LIGO data" (The LIGO-Virgo Collaboration: Abbott et al.; 679 authors including Richard A. Matzner) *Astrophysical Journal* **713** 671 (2010)[arXiv:0909.3583].
23. "Search for gravitational-wave inspiral signals associated with short Gamma-Ray Bursts during LIGO's fifth and Virgo's first science run" (The LIGO-Virgo Collaboration: Abadie et al.; 668 authors including Richard A. Matzner) *Astrophysical Journal* **715** 1453-1461 (2010)[arXiv: 1001.0165]
24. "ERRATUM: "Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar" (2008, ApJ, 683, L45)" (The LIGO-Virgo Collaboration: Abbott et al.; 444 authors including Richard A. Matzner) *Astrophysical Journal Letters* **706** L203-L204 (2009).
25. "Towards a One Percent Measurement of Frame Dragging by Spin with Satellite Laser Ranging to LAGEOS, LAGEOS 2 and LARES and GRACE Gravity Models" (Ignazio Ciufolini, Antonio Paolozzi, Erricos C. Pavlis, John C. Ries, Rolf Koenig, Richard A. Matzner, Giampiero Sindoni and Hans Neumayer *Space Science Reviews* **148** Issue 1-4, pp. 71-104. ISSN: 0038-6308 (Print) 1572-9672 (Online) DOI: 10.1007/s11214-009-9585-7 (Friday, December 18, 2009).
26. "TOPICAL REVIEW: Predictions for the Rates of Compact Binary Coalescences Observable by Ground-based Gravitational-wave Detectors" (The LIGO-Virgo Collaboration: Abadie et al.; 716 authors including Richard A. Matzner) *Classical and Quantum Gravity* **27** (2010) 173001 [arXiv:1003.2480]
27. "All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run" (The LIGO-Virgo Collaboration: Abadie et al.; 667 authors including Richard A. Matzner) *Physical Review* **D81** 102001 (May 2010) [arXiv:1002.1036]
28. "Sensitivity to Gravitational Waves from Compact Binary Coalescences Achieved during LIGO's Fifth and Virgo's First Science Run" (The LIGO-Virgo Collaboration: Abadie et al.; 716 authors including Richard A. Matzner) *Physical Review* **D82**, No.10: URL:

http://link.aps.org/doi/10.1103/DOI: 10.1103/PhysRevD.82.102001; [arXiv:1003.2481]
29. “First search for gravitational waves from the youngest known neutron star” (The LIGOVirgo Collaboration: Abadie et al.; 539 authors including Richard A. Matzner) *Astrophysical Journal* **722** 1504-1513 (2010). [arXiv:1006.2535]
30. “Calibration of the LIGO Gravitational Wave Detectors in the Fifth Science Run” (The LIGO-Virgo Collaboration: Abadie et al.; 539 authors including Richard A. Matzner) *Nuclear Instruments and Methods in Physics Research* **A624** 223-240 (2010) [arXiv:1007.3973].
31. “The Kerr-de Sitter Universe” (Sarp Akcay and Richard A. Matzner) *Classical and Quantum Gravity* **28** 085012 (2011). [arXiv:1011.0479]
32. “Search for gravitational waves from compact binary coalescence in LIGO and Virgo data from S5 and VSR1” (The LIGO-Virgo Collaboration: Abadie et al.; 712 authors including Richard A. Matzner) *Physical Review* **D82** 102001 (2010).
33. “A search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar” (The LIGO-Virgo Collaboration: Abadie et al.; 501 authors including Richard A. Matzner) *Physical Review* **D83** 042001 (2011).
34. “Testing Gravitational Physics with Satellite Laser Ranging” (Ignazio Ciufolini, Antonio Paolozzi, Erricos C. Pavlis, John Ries, Rolf Koenig, Richard Matzner, Giampiero Sindoni and Hans Neumayer) *European Journal of Physics Plus* **126** 72 (2011), DOI: 10.1140/epjp/i2011-11072-2.
35. “Search for gravitational waves from binary black hole inspiral, merger and ringdown” (The LIGO-Virgo Collaboration: Abadie et al.; 724 authors including Richard A. Matzner) *Physical Review* **D83** 122005 (June 2011). [arXiv:1102.3781]
36. “Beating the spin-down limit on gravitational wave emission from the Vela pulsar” (The LIGO-Virgo Collaboration: Abadie et al.; 746 authors including Richard A. Matzner) *Astrophysical Journal* **737** 93 (2011). DOI:10.1088/0004-637X/737/2/93, [arXiv:1104.2712]
37. “Super-Extremal Spinning Black Holes via Accretion” (Tanja Bode, Pablo Laguna and Richard A. Matzner) *Physical Review* **D84** 064044 (2011), [arXiv:1106.1864]
38. “Search for Gravitational Wave Bursts from Six Magnetars” (The LIGO-Virgo Collaboration: Abadie et al.; 770 authors including Richard A. Matzner) *Astrophysical Journal Letters* **734** L35 (June 2011). [arXiv:1011.4079]
39. “Measuring emission coordinates in a pulsar-based relativistic positioning system” (Darius Bunandar, Scott A. Caveny, and Richard A. Matzner *Physical Review* **D15** 84 104005 (November 2011) doi: 10.1103/PhysRevD.84.104005 [arXiv:1107.1688B].
40. “Phenomenology of the Lense-Thirring effect in the Solar System: measurement of framedragging with laser ranged satellites” (Ignazio Ciufolinia, Erricos C. Pavlis, Antonio Paolozzi, John Ries, Rolf Koenig, Richard Matzner, Giampiero Sindoni and Karl Hans Neumayer) *New Astronomy* **17** (2011) 341-346; doi:10.1016/j.newast.2011.08.003.
41. “Directional limits on persistent gravitational waves using LIGO S5 science data” (The LIGO-Virgo Collaboration: Abadie et al.; 714 authors including Richard A. Matzner) (Sept 2011). [arXiv:1109.1809]
42. “Implementation and testing of the first prompt search for electromagnetic counterparts to gravitational wave transients” (The LIGO-Virgo Collaboration: Abadie et al.; 815 authors including Richard A. Matzner) (Sept 2011). [arXiv:1109.3498]
43. “Title: 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 L. Iorio” (J. C. Ries, I. Ciufolini, A. Paolozzi, E. C. Pavlis, R. Koenig, Richard A. Matzner, G. Sindoni and H. Neumayer) *Europhysics Letters* **96** (2011) 30002, doi:1209/0295-5075/96/30002.
44. “All-sky Search for Periodic GravitationalWaves in the Full S5 LIGO Data” (The LIGO-Virgo Collaboration: Abadie et al.; 798 authors including Richard A. Matzner) [arXiv:1110.0208]
45. “A gravitational wave observatory operating beyond the quantum shot-noise limit” (The

LIGO Scientific Collaboration: Abadie et al.; 656 authors including Richard A. Matzner) *Nature Physics* (September 2011) doi:10.1038/nphys2083
46. "LARES Laser Relativity Satellite" (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) *17th International Workshop on Laser Ranging*; http://cddis.gsfc.nasa.gov/lw17/docs/papers/session1/01-LARES Laser Relativity Sat.pdf (May 2011).
47. "Greenhouse effect: temperature of a metal sphere surrounded by a glass shell and heated by sunlight" (Phuc H Nguyen and Richard A Matzner) *European Journal of Physics* **31** 91 (2011); doi:10.1088/0143-0807/33/1/008, [arXiv:1112.5004].
48. "Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600-1000 Hz" (The LIGO-Virgo Collaboration: Abadie et al.; 796 authors including Richard A. Matzner) [arXiv:1112.5004].
49. "Search for Gravitational Waves from Low Mass Compact Binary Coalescence in LIGO's Sixth Science Run and Virgo's Science Runs 2 and 3" (The LIGO-Virgo Collaboration: Abadie et al.; 798 authors including Richard A. Matzner) [arXiv:1111.7314].
50. "Implications For The Origin Of GRB 051103 From LIGO Observations" (The LIGO Scientific Collaboration: Abadie et al.; 570 authors including Richard A. Matzner) [arXiv:1201.4413].
51. "Search for Gravitational Waves from Intermediate Mass Binary Black Holes" (The LIGO-Virgo Collaboration: Abadie et al.; 787 authors including Richard A. Matzner) [arXiv:1201.5999].
52. "LARES, Laser-Ranged Satellite for Testing General Relativity" (Ignazio Ciufolini, Antonio Paolozzi, Erricos C. Pavlis, John Ries, Rolf Koenig, and Richard Matzner) *Space Research Today* issue 182, pages 11-25 (Dec 2011).
53. "All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run" (The LIGO-Virgo Collaboration: Abadie et al.; 789 authors including Richard A. Matzner) [arXiv:1202.2788] (2012).
54. "Sensitivity Achieved by the LIGO and Virgo Gravitational Wave Detectors during LIGO's Sixth and Virgo's Second and Third Science Runs" (The LIGO-Virgo Collaboration: Abadie et al.; 789 authors including Richard A. Matzner) [arXiv:1203.2674] (2012).