

CURRICULUM VITAE

Surname: Quevedo
Name: Hernando
Address: Institute of Nuclear Sciences,
National Autonomous University of Mexico (UNAM)
AP 70543, Mexico City 04510, MEXICO
Tel.: +52 55 56 22 46 90
e-mail: quevedo@nucleares.unam.mx
Hernando Quevedo (0000-0003-4433-5550) - ORCID

Current Positions: Full Professor and Researcher of Physics (UNAM)
Adjunct Professor of Physics (University of Rome, Italy)

Education: People's Friendship University of Russia, Moscow (1976-1982)
M.S., June 1982
Thesis Title: Dual conjugation and construction of vacuum gravitational fields
(in Russian)
Advisor: Prof. N.V. Mitskievich
University of Cologne, Germany (1983-1987)
Ph.D., December 1987
Thesis Title: Static and stationary solutions of Einstein's vacuum field
equations with multipole moments (in German)
Advisors: Prof. F. W. Hehl and Prof. B. Mashhoon

Mother Tongue: Spanish

Foreign Languages: English, Italian, German, Portuguese, Russian

Academic Positions:

- Research Fellow, University of Cologne (1987-1988)
- Visiting Scientist, University of Missouri-Columbia (1988-1989)
- Research Fellow, University of Cologne (1989-1992)
- Assistant Professor, National Autonomous University of Mexico (1992-1995)
- Associate Professor, National Autonomous University of Mexico (1995-2001)
- Full Professor, National Autonomous University of Mexico (2001- present)
- Visiting Professor, University of California, Davis (2003-2004)
- Visiting Professor, University of Rome La Sapienza (2008-2009)
- Adjunct Professor, University of Rome La Sapienza (2009-present)
- Visiting Professor, Brazilian Center for Physical Research (2013)
- Visiting Professor, National University of Kazakhstan (2014)

Teaching Experience:

- Teaching Assistant, University of Cologne (1984-1992)
In charge of recitation sessions for lectures in Relativity Theory, Computer Algebra (REDUCE), and Quantum Field Theory.
- Professor of Physics, National Autonomous University of Mexico (since 1992)

Undergraduate courses: Mechanics, Electromagnetism, Special Relativity, General Relativity, Quantum Mechanics, Cosmology
Graduate courses: Classical Mechanics, Classical Electrodynamics, General Relativity, Geometrical Methods in Physics, Quantum Gravity, Geometrothermodynamics

Areas of Interest:

- General Relativity and Gravitation (Astrophysics and Cosmology)
- Mathematical Physics (Geometrothermodynamics and Quantum Gravity)

Professional Activities:

- *Publications:* 202 research papers
(157 in indexed journals, 43 proceedings, 2 book chapters)
Citations: more than 4000 (google scholar)

- *Thesis supervisor:* 53 thesis (19 BSc; 20 MSc; 14 PhD).

- *Referee for scientific journals:* Classical and Quantum Gravity, European Physical Journal, General Relativity and Gravitation, Nuclear Physics B, Physical Review D, Physical Review Letters, Physics Letters A, Canadian Journal of Physics

Selected Publications:

Multipole moments in general relativity -Static and stationary solutions- (H. Quevedo) Fortschritte der Physik 38, 733 (1990). <https://doi.org/10.1002/prop.2190381002>

Rotating gravitational waves (B. Mashhoon and H. Quevedo) Physics Letters A 151, 464 (1990). [https://doi.org/10.1016/0375-9601\(90\)90462-W](https://doi.org/10.1016/0375-9601(90)90462-W)

Generalization of Kerr spacetime (H. Quevedo and B. Mashhoon) Physical Review D 43, 3902 (1991). <https://doi.org/10.1103/PhysRevD.43.3902>

Black holes have no short hair (D. Núñez, H. Quevedo and D. Sudarsky) Physical Review Letters 76, 571 (1996). <https://doi.org/10.1103/PhysRevLett.76.571>

On the gravitoelectromagnetic stress-energy tensor (B. Mashhoon, J. C. McClune and H. Quevedo) Classical and Quantum Gravity **16**, 1137 (1999). <https://doi.org/10.1088/0264-9381/16/4/004>

Kerr Metric as an exact solution for unpolarized $S^1 \times S^2$ Gowdy models”, (O. Obregón, H. Quevedo and M. P. Ryan) Physical Review D **65**, 024022 (2001). <https://doi.org/10.1103/PhysRevD.65.024022>

Schrödinger and Fock representation for a field theory on curved spacetime”, (A. Corichi, J. Cortez and H. Quevedo) Annals of Physics **313**, 446 (2004). <https://doi.org/10.1016/j.aop.2004.05.004>

- Topological quantization of gravitational fields (L. Patiño and H. Quevedo) *Journal of Mathematical Physics* 46, 022502 (2005). <https://doi.org/10.1063/1.1828586>
- Geometrothermodynamics (H. Quevedo) *Journal of Mathematical Physics* 48, 013506 (2007). <https://doi.org/10.1063/1.2409524>
- Geometrothermodynamics of black holes (H. Quevedo) *General Relativity and Gravitation* 40, 971 (2008). <https://doi.org/10.1007/s10714-007-0586-0>
- Unified geometric description of black hole thermodynamics (J. L. Álvarez, H. Quevedo and A. Sánchez) *Physical Review D* 77, 084004 (2008). <https://doi.org/10.1103/PhysRevD.77.084004>
- Topological spectrum of mechanical systems (F. Nettel, H. Quevedo and M. Rodríguez), *Reports on Mathematical Physics* 64, 355 (2009). [https://doi.org/10.1016/S0034-4877\(10\)00003-0](https://doi.org/10.1016/S0034-4877(10)00003-0)
- Mass quadrupole as a source of naked singularities (H. Quevedo) *International Journal of Modern Physics D* 20, 1779 (2011). <https://doi.org/10.1142/S0218271811019852>
- Equatorial circular motion in Kerr spacetime (D. Pugliese, H. Quevedo and R. Ruffini) *Physical Review D* 84, 044030 (2011). <https://doi.org/10.1103/PhysRevD.84.044030>
- Characterizing repulsive gravity with curvature eigenvalues (O. Luongo, H. Quevedo) *Physical Review D* 90, 084032 (2014). <https://doi.org/10.1103/PhysRevD.90.084032>
- Geometrothermodynamic model for the evolution of the Universe (C. Gruber and H. Quevedo) *Journal of Cosmology and Astroparticles Physics* 7, 032 (2017). <https://doi.org/10.1088/1475-7516/2017/07/032>
- Quasi-homogeneous black hole thermodynamics (H. Quevedo, M. N. Quevedo, and A. Sánchez) *European Physical Journal C* 79, 229 (2019). <https://doi.org/10.1140/epjc/s10052-019-6745-0>
- C3 matching for asymptotically flat spacetimes (A. C. Gutierrez-Piñeres and H. Quevedo) *Classical and Quantum Gravity* 36, 135003 (2019). <https://doi.org/10.1088/1361-6382/ab2422>
- Geometrothermodynamics of van der Waals systems (H. Quevedo, M. N. Quevedo and A. Sánchez.) *Journal of Geometry and Physics* 175, 104495 (2022) <https://doi.org/10.1016/j.geomphys.2022.104495>

Complete List of Publications:

I. ARTICLES IN INTERNATIONAL JOURNALS

1. "Exterior Gravitational Field of a Rotating Deformed Mass", (H. Quevedo and B. Mashhoon), *Physics Letters A* **109**, 13 - 18 (1985).
2. "Class of Stationary Axisymmetric Solutions of Einstein's Equations in Empty Space", (H. Quevedo) *Physical Review D* **33**, 324 - 327 (1986).
3. "On the Exterior Gravitational Field of a Mass with a Multipole Moment", (H. Quevedo) *General Relativity and Gravitation* **19**, 1013 - 1023 (1987).
4. "Geodesics in the Erez-Rosen Space-time", (H. Quevedo and L. Parkes) *General Relativity and Gravitation* **21**, 1047 - 1072 (1989).
5. "General Static Axisymmetric Solution of Einstein's Vacuum Field Equations in Prolate Spheroidal Coordinates", (H. Quevedo) *Physical Review D* **39**, 2904 - 2911 (1989).
6. "Exterior Gravitational Field of a Charged Rotating Mass with Arbitrary Quadrupole Moment", (H. Quevedo and B. Mashhoon), *Physics Letters A* **148**, 149 - 153 (1990).
7. "Multipole Moments in General Relativity -Static and Stationary Solutions-", (H. Quevedo) *Fortschritte der Physik -progress of physics*, 38, 733 - 840 (1990).
- 8 "Rotating Gravitational Waves", (B. Mashhoon and H. Quevedo), *Physics Letters A* **151**, 464 - 468 (1990).
9. "On the Geodesics of the Erez-Rosen Spacetime (letter)", (H. Quevedo and L. Parkes), *General Relativity and Gravitation*, **23**, 495 - 497 (1991).
10. "Generalization of Kerr Spacetime", (H. Quevedo and B. Mashhoon), *Physical Review D*, **43**, 3902 - 3906 (1991).
11. "Comment on New Exact Solution for the Exterior Gravitational Field of a Spinning Mass", (H. Quevedo) *Physical Review Letters*, **67**, 1050 (1991).
12. "Generating Solutions of the Einstein - Maxwell Equations with Prescribed Physical Properties", (H. Quevedo) *Physical Review D*, **45**, 1174 - 1177 (1992).
13. "Complex Transformations of the Curvature Tensor", (H. Quevedo) *General Relativity and Gravitation*, **24**, 693 - 703 (1992).
14. "Determination of the Metric from the Curvature", (H. Quevedo) *General Relativity and Gravitation*, **24**, 799 - 819 (1992).
15. "Relativistic Tidal Accelerations", (B. Mashhoon and H. Quevedo) *Il Nuovo Cimento* **110 B**, 291 - 305 (1995).

16. "Class of Einstein - Maxwell Dilatons", (T. Matos, D. Núñez, and H. Quevedo) *Physical Review D* **51**, R310 - R313 (1995).
17. "On the Thermodynamics of Simple Non - Isentropic Perfect Fluids in General Relativity", (H. Quevedo and R. A. Sussman) *Classical and Quantum Gravity*, **12**, 859 - 874 (1995).
18. "Thermodynamics of the Stephani Universes", (H. Quevedo and R. A. Sussman) *Journal of Mathematical Physics* **36**, 1365 - 1377 (1995).
19. "Large Black Holes have no Hair", (D. Sudarsky, D. Núñez and H. Quevedo) *Helvetica Physica Acta*, **69**, 276 - 280 (1996).
20. "Galactic Periodicity and the Oscillating G Model", (M. Salgado, D. Sudarsky and H. Quevedo) *Physical Review D*, **53**, 6771 - 6783 (1996).
21. "Black Holes Have No Short Hair", (D. Núñez, H. Quevedo and D. Sudarsky) *Physical Review Letters*, **76**, 571 - 574 (1996).
22. "On the Thermodynamical Interpretation of Perfect Fluid Solutions of the Einstein Equations with No Symmetry", (A. Krasinski, H. Quevedo and R. A. Sussman) *Journal of Mathematical Physics*, **38**, 2602 - 2610 (1997).
23. "Gravitational Superenergy Tensor", (B. Mashhoon, J.C. McClune and H. Quevedo) *Physics Letters A*, **231**, 47 - 51 (1997).
24. "Cosmological Dark Matter and Galactic Periodicity", (D. Sudarsky, H. Quevedo and M. Salgado) *Revista Mexicana de Física*, **43**, 699 - 710 (1997).
25. "Has Cosmological Dark Matter Been Observed?" (M. Salgado, D. Sudarsky and H. Quevedo) *Physics Letters B*, **408**, 69 - 74 (1997).
26. "The Oscillating G Model: A possible Explanation for the Nature of Cosmological Nonbaryonic Matter", (H. Quevedo, M. Salgado and D. Sudarsky) *Astrophysical Journal*, **488**, 14 - 26 (1997).
27. "Dynamics of a Spherically Symmetric Scalar Shell", (D. Núñez, H. Quevedo and M. Salgado) *Physical Review D*, **58**, 083506-1 - 083506-9 (1998).
28. "Einstein's Equations as Functional Geodesics", (D. Núñez, H. Quevedo and A. Sánchez) *Revista Mexicana de Física*, **44**, 440 - 448 (1998).
29. "A Scalar Field as a Candidate for the Cosmological Non - baryonic Dark Matter", (H. Quevedo, M. Salgado and D. Sudarsky) *General Relativity and Gravitation*, **31**, 767 - 774 (1999).
30. "On the Gravitoelectromagnetic Stress - Energy Tensor", (B. Mashhoon, J. C. McClune and H. Quevedo) *Classical and Quantum Gravity* **16**, 1137 - 1148 (1999).

31. "On the Motion of Shells in General Relativity", (D. Núñez and H. Quevedo) *General Relativity and Gravitation*, **31**, 753 - 759 (1999).
32. "Uniqueness Theorems for Static Black Holes in Metric-Affine Gravity", (E. Ayón-Beato, A. García, A. Macías and H. Quevedo) *Physical Review D* **61**:084017-1 - 084017-6 (2000).
33. "On a Class of Rotating Gravitational Waves", (B. Mashhoon, J. C. McClune and H. Quevedo) *Classical and Quantum Gravity* **17** 533-549 (2000).
34. "Spatial Structure and Periodicity in the Universe", (J. A. González, H. Quevedo, M. Salgado and D. Sudarsky) *Astronomy and Astrophysics* **362** 835 - 839 (2000).
35. "Gravitational Fields and Nonlinear Σ -Models" (J. Cortez, D. Núñez and H. Quevedo) *International Journal of Theoretical Physics* **40** 251 - 260 (2001).
36. "Static Black Holes of Metric-Affine Gravity in the Presence of Matter", (E. Ayón-Beato, A. García, A. Macías and H. Quevedo) *Physical Review D* **64** 024026-1 - 024026-7 (2001).
37. "Local Constraints on the Oscillating G Model", (J. A. González, H. Quevedo, M. Salgado and D. Sudarsky) *Physical Review D* **64**, 047504-1 - 047504-4 (2001).
38. "Quantum Bounds for Gravitational de Sitter Entropy and the Cardy - Verlinde Formula", (S. Nojiri, O. Obregón, S. D. Odintsov, H. Quevedo and M. Ryan) *Modern Physics Letters A* **16** 1181 - 1192 (2001).
39. "Kerr Metric as an Exact Solution for Unpolarized $S^1 \times S^2$ Gowdy Models", (O. Obregón, H. Quevedo and M. P. Ryan), *Physical Review D* **65** 024022-1 - 024022-10 (2001).
40. "Normal Coordinates and Primitive Elements in the Hopf Algebra of Renormalization", (C. Chryssomalakos, H. Quevedo, M. Rosenbaum and J. D. Vergara), *Communications in Mathematical Physics* **225** 465 - 485 (2002).
41. "On Unitary Time Evolution in Gowdy T^3 Cosmologies", (A. Corichi, J. Cortez and H. Quevedo), *International Journal of Modern Physics D* **11** 1451 - 1468 (2002).
42. "Schrödinger Representation for a Scalar Field on Curved Spacetime", (A. Corichi, J. Cortez and H. Quevedo), *Physical Review D* **66** 085025-1 - 085025-9 (2002).
43. "Note on Canonical Quantization and Unitary Equivalence in Field Theory", (A. Corichi, J. Cortez and H. Quevedo), *Classical and Quantum Gravity*, **20** L83 - L93 (2003).
44. "Towards the Entropy of Gravity Time - Dependent Models via the Cardy - Verlinde Formula", (O. Obregón, L. Patiño and H. Quevedo), *Physical Review D* **68** 026002-1 - 026002-6 (2003).
45. "Bosonic and Fermionic Behavior in Gravitational Configurations", (L. Patiño and H. Quevedo), *Modern Physics Letters A* **18** 1331 - 1342 (2003).

46. "Thermodynamic Scheme of Inhomogeneous Perfect Fluid Mixtures", (R. D. Zárata and H. Quevedo) *Classical and Quantum Gravity* **21** 197 - 205 (2004).
47. "Hopf Algebra Primitives in Perturbation Quantum Field Theory", (M. Rosenbaum, J. D. Vergara and H. Quevedo), *Journal of Geometry and Physics* **49** 206 - 223 (2004).
48. "Generating Gowdy Cosmological Models", (A. Sánchez, A. Macías and H. Quevedo), *Journal of Mathematical Physics* **45** 1849 - 1858 (2004).
49. "Schrödinger and Fock Representation for a Field Theory on Curved Spacetime", (A. Corichi, J. Cortez and H. Quevedo), *Annals of Physics* **313** 446 - 478 (2004).
50. "Time and 'Angular' Dependent Backgrounds from Stationary Axisymmetric Solutions", (O. Obregón, H. Quevedo and M. Ryan), *Physical Review D* **70**, 064035-1 - 064035-13 (2004).
51. "Regular Non - Twisting S-Branes", (O. Obregón, H. Quevedo and M. Ryan) *Journal of High Energy Physics* **07**:005 (2004).
52. "Topological Quantization of Gravitational Fields", (L. Patiño and H. Quevedo), *Journal of Mathematical Physics* **46** 022502-1 - 022502-11 (2005).
53. "Towards the Deformation Quantization of Linearized Gravity", (H. Quevedo and J. G. Tafoya), *General Relativity and Gravitation* **37** 2083-2092 (2005).
54. "Acausality in Gowdy Spacetimes", (H. Quevedo), *General Relativity and Gravitation*, **38** 599-606 (2006).
55. "Local Lorentz Invariance in $N = 1$ Supergravity", (A. Macías, H. Quevedo and A. Sánchez) *Physical Review D* **73** 027501-1 - 027501-4 (2006).
56. "Geometrothermodynamics", (H. Quevedo) *Journal of Mathematical Physics*, **48** 013506-1 – 013506-14 (2007).
57. "Entropy and Anisotropy" (F. J. Hernández and H. Quevedo) *General Relativity and Gravitation*, **39** 1297 - 1309 (2007).
58. "Geometrothermodynamics of Black Holes" (H. Quevedo) *General Relativity and Gravitation*, **40** 971-984 (2008).
59. "Unified Geometric Description of Black Hole Thermodynamics" (J. L. Álvarez, H. Quevedo and A. Sánchez), *Physical Review D*, **77** 084004-1 – 084004-6 (2008).
60. "Geometrothermodynamics of Asymptotically Anti-de Sitter Black Holes" (H. Quevedo and A. Sánchez) *Journal of High Energy Physics*, **0809**: 034 (2008).
61. "Gravitational Fields as Generalized String Models" (F. J. Hernández, F. Nettel and H. Quevedo), *Gravitation and Cosmology*, **15** 109-120 (2009).

62. "Geometric Description of BTZ Black Hole Thermodynamics" (H. Quevedo, A. Sánchez), *Physical Review D*, **79**:024012-1 – 024012-9 (2009).
63. "Geometrothermodynamics of Black Holes in Two Dimensions" (H. Quevedo, A. Sánchez), *Physical Review D*, **79**:087504-1 – 087504-4 (2009).
64. "Topological Spectrum of Mechanical Systems" (F. Nettel, H. Quevedo and M. Rodríguez), *Reports on Mathematical Physics*, **64** 355-365 (2009).
65. "Generalized Kerr Spacetime with an Arbitrary Mass Quadrupole Moment: Geometric Properties Versus Particle Motion" (D. Bini, A. Geralico, O. Luongo, and H. Quevedo), *Classical and Quantum Gravity* **26**, 225006 (2009).
66. "Thermodynamic Systems as Extremal Hypersurfaces" (A. Vázquez, H. Quevedo, A. Sánchez), *Journal of Geometry and Physics*, **60** 1942-1949 (2010).
67. "Exterior and Interior Metrics with Quadrupole Moment" (Hernando Quevedo), *General Relativity and Gravitation*, **43**:1141-1152 (2011).
68. "Phase Transitions in Geometrothermodynamics" (H. Quevedo, A. Sánchez, S. Taj and A. Vázquez), *General Relativity and Gravitation*, **43**:1153-1165 (2011).
69. "Mass Quadrupole as a Source of Naked Singularities" (H. Quevedo), *International Journal of Modern Physics D* **20**, 1779-1787 (2011).
70. "Curvature as a Measure of the Thermodynamic Interaction" (H. Quevedo, A. Sánchez, S. Taj and A. Vázquez) *Journal of the Korean Physical Society*, **57**, 646-650 (2010).
71. "Topological Spectrum of the Harmonic Oscillator" (F. Nettel and H. Quevedo), *International Journal of Pure and Applied Mathematics* **70**, 117-123 (2011).
72. "Circular Motion of Neutral Test Particles in Reissner-Nordström spacetime" (D. Pugliese, H. Quevedo and R. Ruffini), *Physical Review D* **83**:024021-1 – 024021-12 (2011).
73. "Thermodynamic Geometry of Charged Rotating BTZ Black Holes" (M. Akbar, H. Quevedo, K. Saifullah, A. Sanchez, S. Taj) *Physical Review D* **83**:084031-1 – 084031-10 (2011).
74. "Motion of charged test particles in Reissner-Nordström spacetime" (D. Pugliese, H. Quevedo and R. Ruffini), *Physical Review D* **83**:104052-1 – 104052-26 (2011).
75. "Equatorial circular motion in Kerr spacetime" (D. Pugliese, H. Quevedo and R. Ruffini), *Physical Review D* **84**:044030-1 – 044030-24 (2011).
76. "Statistical Thermodynamics of Economic Systems" (H. Quevedo and M. N. Quevedo), *Journal of Thermodynamics*, **2011**: 676495 (2011).

77. "An expanding Universe with Constant Pressure and no Cosmological Constant" (O. Luongo and H. Quevedo), *Astrophysics and Space Science* **338** 345 – 349 (2012).
78. "Holographic Dark Matter and Dark Energy with Second Order Invariants", (A. Aviles, L. Bonanno, O. Luongo and H. Quevedo) *Physical Review D* **84**:103520-1 – 103520-9 (2011).
79. "Geometrothermodynamics in Horava-Lifshitz Gravity" (H. Quevedo, A. Sánchez, S. Taj, A. Vazquez), *Journal of Physics A: Mathematical and Theoretical* **45**:055211 (2012).
80. "Geometrothermodynamics of Five Dimensional Black Holes in Einstein-Gauss-Bonnet-Theory" (S. Taj, H. Quevedo and A. Sánchez), *General Relativity and Gravitation* **44** 1489 - 1523 (2012).
81. "Extending the Generalized Chaplygin Gas Model by Using Geometrothermodynamics" (A. Aviles, A. Bastarrachea-Almodovar, L. Campuzano and H. Quevedo), *Physical Review D* **86**, 063508 (2012).
82. "Gravitational Field of Compact Objects in General Relativity" (K. Boshkayev, H. Quevedo and R. Ruffini), *Physical Review D* **86**, 064043 (2012).
83. "Interior Solutions of Einstein Equations" (S. Toktarbay, H. Quevedo and M. Abishev) *Atomic Physics and Elementary Particles* **5**, 22 - 27 (2012) in Russian.
84. "Cosmography and Constraints on the Equation of State of the Universe in Various Parametrizations" (A. Aviles, C. Gruber, O. Luongo and H. Quevedo), *Physical Review D* **86**, 123516 (2012).
85. "Quadrupolar Gravitational Fields described by the q-metric" (H. Quevedo, S. Toktarbay and A. Yerlan) *International Journal of Mathematics and Physics* **3**, 133 (2012).
86. "Topological Discretization of Bosonic Strings" (G. Arciniega, F. Nettel, L. Patiño and H. Quevedo) *International Journal of Pure and Applied Mathematics* **82** 62-85 (2013).
87. "Conformastatic disk-haloes in Einstein-Maxwell Gravity" (A. Gutiérrez-Piñeres, G. González, H. Quevedo), *Physical Review D* **87**:044010 (2013).
88. "The Conformal Metric Structure of Geometrothermodynamics" (A. Bravetti, C. S. Lopez-Monsalvo, F. Nettel and H. Quevedo), *Journal of Mathematical Physics* **54**, 033513 (2013).
89. "Equatorial Circular Orbits of Neutral Test Particles in the Kerr-Newman Spacetime" (D. Pugliese, H. Quevedo and R. Ruffini), *Physical Review D* **88**:024042 (2013).
90. "Charged Boson Stars" (D. Pugliese, H. Quevedo, J. A. Rueda H and R. Ruffini), *Physical Review D* **88**: 024053 (2013).
91. "Geometrothermodynamics of Higher Dimensional Black Holes" (A. Bravetti, D. Momeni, R. Myrzakulov and H. Quevedo), *General Relativity and Gravitation* **45** 1603 -1617 (2013).

92. "Conformally Invariant Thermodynamics of a Maxwell-Dilaton Black Hole" (C. S. Lopez-Monsalvo, F. Nettel and H. Quevedo), *General Relativity and Gravitation* **45** 2553 - 2568 (2013).
93. "Topological Quantization of Free Massive Bosonic Fields" (G. Arciniega, F. Nettel, L. Patiño, and H. Quevedo), *Journal of Geometry and Symmetry in Physics* **26**, 1 – 12 (2012).
94. "Geometric Description of Chemical Reactions" (H. Quevedo and D. Tapias) *Journal of Mathematical Chemistry*, **52**, 141 – 161 (2014).
95. "Cosmographic Study of the Universe's Specific Heat: A Landscape for Cosmology?" (O. Luongo and H. Quevedo), *General Relativity and Gravitation* **46**, 1649 (2014).
96. "A Unified Dark Energy Model from a Vanishing Speed of Sound with Emergent Cosmological Constant" (O. Luongo and H. Quevedo), *International Journal of Modern Physics D* **23**, 1450012 (2014).
97. "Representation Invariant Geometrothermodynamics: Applications to Ordinary Thermodynamic Systems" (A. Bravetti, C. S. Lopez-Monsalvo, F. Nettel and H. Quevedo) *Journal of Geometry and Physics* **81**, 1 – 9 (2014).
98. "On the Ensemble Dependence in Black Hole Geometrothermodynamics" (H. Quevedo, M.N. Quevedo, A. Sanchez and S. Taj), *Physica Scripta* **8**, 084007 (2014).
99. "A Stationary q-metric" (S. Toktarbay and H. Quevedo) *Gravitation and Cosmology* **20**, 252 – 254 (2014).
100. "Characterizing Repulsive Gravity with Curvature Eigenvalues" (O. Luongo, H. Quevedo) *Physical Review D* **90**, 084032 (2014).
101. "Cosmological Applications of Geometrothermodynamics" (H. Quevedo and M. N. Quevedo) *Gravitation and Cosmology* **20**, 208 – 2013 (2014).
102. "Single—Bubble Sonoluminescence as Dicke Superradiance" (M. Aparicio Alcalde, H. Quevedo and N. F. Svaiter) *Physica A* **416**, 142 – 148 (2014).
103. "Relativistic Like Structure of Classical Thermodynamics" (H. Quevedo, A. Sánchez, A. Vázquez) *General Relativity and Gravitation* **47**, 36 (2015).
104. "Generating Static Perfect-Fluid Solutions of Einstein's Equations" (H. Quevedo, S. Toktarbay) *Journal of Mathematical Physics* **56**, 052502 (2015).
105. "The Ergoregion in the Kerr Spacetime: Properties of the Equatorial Circular Motion" (D. Pugliese, H. Quevedo) *European Physical Journal C* **75**, 234 (2015).
106. "Variational Thermodynamics of Relativistic Thin Disks" (A. C. Gutiérrez-Piñeres, C. S. Lopez-Monsalvo and H. Quevedo) *General Relativity and Gravitation* **47**, 144 (2015).

107. "Thermodynamics and Geometrothermodynamics of Born-Infeld Black Holes with Cosmological Constant" (H. Quevedo, M. N. Quevedo and A. Sánchez) *International Journal of Modern Physics D* **24**, 1550092 (2015).
108. "Geodesics in the Field of a Rotating Deformed Gravitational Source" (K. A. Boshkayev, H. Quevedo, M. S. Abutalip, Zh. A. Kalymova, Sh. S. Suleymanova) *International Journal of Modern Physics A* **31**, 1641006 (2016).
109. "Geometrothermodynamics of Phantom AdS Black Holes" (H. Quevedo, M.N. Quevedo, and A. Sánchez) *European Physical Journal C* **76**, 110 (2016).
110. "Cardy-Verlinde Entropy in Horava-Lifshitz Gravity" (O. Luongo and H. Quevedo) *Physical Review D* **93**, 064057 (2016).
111. "Income Distribution in the Colombian Economy from an Econophysics Perspective" (H. Quevedo and M.N. Quevedo) *Cuadernos de Economía* **69**, 691 (2016).
112. "Motion of Test Particles in the Field of a Naked Singularity" (K. Boshkayev, E. Gasperin, A.C. Gutiérrez Piñeres, H. Quevedo, and S. Toktarbay) *Physical Review D* **93**, 024024 (2016).
113. "On the Equivalence of Approximate Stationary Axially Symmetric Solutions of Einstein Field Equations" (K. Boshkayev, H. Quevedo, S. Toktarbay, B. Zhami, M. Abishev) *Gravitation and Cosmology* **22** 305 – 311 (2016).
114. "Test Particles in a Magnetized Conformastatic Spacetime" (A.C. Gutiérrez-Piñeres, Abraão J. S. Capistrano, and H. Quevedo) *Physical Review D* **93**, 124009 (2016).
115. "Einstein-Maxwell-dilaton phantom black holes: Thermodynamics and geometrothermodynamics" (H. Quevedo, M.N. Quevedo, and A. Sánchez) *Physical Review D* **94** 024057 (2016).
116. "Hartle formalism for rotating Newtonian configurations" (K. Boshkayev, H. Quevedo, Z. Kalymova, B. Zhami) *European Journal of Physics* **37** 065602 (2016).
117. "Newman-Janis Ansatz in conformastatic spacetimes" (A. C. Gutiérrez-Piñeres, H. Quevedo) *General Relativity and Gravitation* **48** 146 (2016).
118. "I-love-Q relations for white dwarf stars" (K. Boshkayev, H. Quevedo, B. Zhami) *Monthly Notices of The Royal Astronomical Society* **464** (4), p 4349-4359 (2017).
119. "Homogeneity and thermodynamic identities in geometrothermodynamics" (Hernando Quevedo, Maria N. Quevedo, A. Sanchez) *European Physical Journal C* **77**:158 (2017).
120. "Geometrothermodynamic model for the evolution of the Universe" (Christine Gruber, Hernando Quevedo) *Journal of Cosmology and Astroparticles Physics* **7**, 032 (2017).
121. "Einstein equations with fluctuating volume" (Vladimir Dzhunushaliev, Hernando Quevedo) *Gravitation and Cosmology*, **23**, pp 280 – 286 (2017).

122. "General classification of charged test particle circular orbits in Reissner-Nordstrom spacetime" (Daniela Pugliese; Hernando Quevedo; Remo Ruffini) *European Physical Journal C* **77**, 206 (2017).
123. "Topological Quantum Numbers of Dyonic Fields over Taub-Bolt" (Daniel Flores-Alfonso, Hernando Quevedo) *Journal of Geometry and Symmetries in Physics* **44**, pp 39 – 54 (2017).
124. "Observers in Kerr spacetimes: the ergoregion on the equatorial plane" (Daniela Pugliese, Hernando Quevedo) *The European Physical Journal C* **78**, 69 (2018).
125. "Self-accelerated Universe Induced by Repulsive Effects as an Alternative to Dark Energy and Modified Gravities" (Orlando Luongo, Hernando Quevedo) *Foundations of Physics* **48** pp. 17 – 26 (2018).
126. "Comparison of Vacuum Static Quadrupolar Metrics" (Francisco Frutos-Alfaro, Hernando Quevedo, Pedro Sánchez) *Royal Society Open Science* **5**:170826 (2018).
127. "Non-validity of I-Love-Q Relations for Hot White Dwarf Stars" (K. Boshkayev, H. Quevedo) *Monthly Notices of the Royal Astronomical Society* **478**, pp. 1893-1899 (2018).
128. "Non-perturbative quantization à la Heisenberg: modified gravities, Wheeler-DeWitt equations, and monopoles in QCD" (Vladimir Dzhunushaliev, Vladimir Folomeev and Hernando Quevedo) *Gravitation and Cosmology* **25**, pp. 1-17 (2019).
129. "Quasi-homogeneous black hole thermodynamics" (H. Quevedo, M. N. Quevedo, and A. Sanchez) *European Physical Journal C: Particles and Fields* **79**, 3, 229 (2019).
130. "Disclosing connections between black holes and naked singularities: horizon remnants, Killing throats and bottlenecks" (Daniela Pugliese, Hernando Quevedo) *European Physical Journal C: Particles and Fields* **79**, 3, 209 (2019).
131. "Statistical mechanics of the self-gravitating gas in the Tsallis framework" (L. F. Escamilla-Herrera, C. Gruber, V. Pineda-Reyes, and H. Quevedo) *Physical Review E: Statistical, Nonlinear, and Soft Matter* **99**, 022108 (2019).
132. "Statistical origin of Legendre invariant metrics" (V. Pineda-Reyes, L. F. Escamilla-Herrera, C. Gruber, F. Nettel and H. Quevedo) *Physica A: Statistical Mechanics and its Applications* **526**, 120767 (2019).
133. "Topological Characterization of Higher Dimensional Charged Taub-NUT Instantons" (Daniel Flores-Alfonso, Hernando Quevedo) *International Journal of Geometric Methods in Modern Physics* **16**, 1950154 (2019).
134. "Kinematic and statistical inconsistencies of Horava-Lifshitz cosmology" (O. Luongo, M. Muccino and H. Quevedo) *Physics of the Dark Universe* **25**, 100313 (2019).

135. "C3 matching for asymptotically flat spacetimes" (Antonio C. Gutierrez-Piñeres and Hernando Quevedo) *Classical and Quantum Gravity* **36**, 135003 (2019).
136. "Extended thermodynamics of self-gravitating skyrmions" (Daniel Flores-Alfonso and Hernando Quevedo) *Classical and Quantum Gravity* **36**, 154001 (2019).
137. "Extensions of modified Chaplygin gas from Geometrothermodynamics" (Hachemi B. Benaoum, Orlando Luongo, Hernando Quevedo) *European Physical Journal C* **79**, 577 (2019).
138. "The physical significance of geometrothermodynamic metrics" (Viridiana Pineda, Hernando Quevedo, María N. Quevedo, Alberto Sánchez, Edgar Valdes) *International Journal of Geometric Methods in Modern Physics* **16**, 1950168 (2019).
139. "Charged Taub-NUT solution in Lovelock gravity with generalized Wheeler polynomials" (Corral, Cristobal; Flores-Alfonso, Daniel; Quevedo, Hernando) *Physical Review D* **100**, 064051 (2019).
140. "The Erez-Rosen Solution Versus the Hartle-Thorne Solution" (Kuantay Boshkayev, Hernando Quevedo, Gulmira, Algis Malybaev, and Ainur Urazalina) *Symmetry* **11**, 1324 (2019).
141. "Flux quantization in dilatonic Taub-NUT dyons" (Daniel Flores-Alfonso, Hernando Quevedo) *Reports on Mathematical Physics* **84**, 171-185 (2019).
142. "Geometrothermodynamics of Black Hole Binary Systems" (Hernando Quevedo, María N. Quevedo and Alberto Sánchez) *International Journal of Modern Physics D* **29**, 2050053 (2020).
143. "Singularity theorems in Schwarzschild spacetimes" (Servando V. Serdio and Hernando Quevedo) *European Physical Journal Plus* **135** article number: 636 (2020).
144. "Repulsive regions in Lemaître–Tolman–Bondi gravitational collapse" (Roberto Giambò, Orlando Luongo and Hernando Quevedo) *Physics of the Dark Universe* **30** 100721 (2020).
145. "Kerr metric bundles: Killing horizons confinement, light-surfaces and horizon replicas" (Daniela Pugliese and Hernando Quevedo) *European Physical Journal* **81**, 3, 258 (2021).
146. "Reparametrizations and metric structures in thermodynamic phase space" (V. Pineda-Reyes, L. F. Escamilla-Herrera, C. Gruber, F. Nettel and H. Quevedo) *Physica A: Statistical Mechanics and its Applications* **563**:125464 (2021).
147. "Quantum signatures from Horava-Lifshitz cosmography" (Celia Escamilla-Rivera and Hernando Quevedo) *Classical and Quantum Gravity* **38** 115009 (2021).
148. "Repulsive gravity effects in horizon formation Horizon remnants in naked singularities" (Daniela Pugliese and Hernando Quevedo) *General Relativity and Gravitation* **53**(10), 89 (2021).
149. "Luminosity of accretion disks in compact objects with a quadrupole" (Boshkayev, K; Konysbayev, T; Kurmanov, E; Luongo, O; Malafarina, D; Quevedo, H.) *Physical Review D* **104**, 084009 (2021).

150. "Extracting information on black hole horizons" (Daniela Pugliese and Hernando Quevedo.) *Nuclear Physics B* **972**, 115544 (2021).
151. "Approximate perfect fluid solutions with quadrupole moment" (Abishev, M; Beissen, N; Belissarova, F; Boshkayev, K; Mansurova, A; Muratkhan, A; Quevedo, H; Toktarbay, S.) *International Journal of Modern Physics D* **30**, 2150096 (2021).
152. "Black shells and naked shells" (Walter Pulido and Hernando Quevedo) *International Journal of Geometric Methods in Modern Physics* **18**, 2150200 (2021).
153. "Accretion disk luminosity for black holes surrounded by dark matter with anisotropic pressure" (Kuantay Boshkayev, Roberto Giambò, Talgar Konysbayev, Ergali Kurmanov, Orlando Luongo, Daniele Malafarina, Hernando Quevedo), *The Astrophysical Journal* **925**:210 (2022).
154. "Thermodynamic length, geometric efficiency and Legendre invariance" (Carlo Cafaro, Orlando Luongo, Stefano Mancini, Hernando Quevedo) *Physica A* **590**, 126740 (2022).
155. "Darmois matching and C3 matching" (Antonio C. Gutiérrez-Piñeres, Hernando Quevedo) *Classical and Quantum Gravity* **39**, 035015 (2022).
156. "Geometrothermodynamics of van der Waals systems" (Hernando Quevedo, María N. Quevedo and Alberto Sánchez.) *Journal of Geometry and Physics* **176**, 104495 (2022).
157. "Gravitational field of slightly deformed naked singularities" (S.Toktarbay, H. Quevedo, M. Abishev, and A. Muratkhan) *The European Physical Journal C* **82**, 1 (2022).

II. ARTICLES IN CONFERENCE PROCEEDINGS

1. "The Kerr - Nut Metric with All Mass Multipole Moments" (H. Quevedo), in Proceedings of the Fourth Marcel Grossmann Meeting on General Relativity (Rome, 1985), edited by R. Ruffini (Elsevier Science Publishers B.V., Amsterdam, 1986) Part B pp. 1015 – 1023.
2. "Cylindrically Symmetric Gravitational Waves with Rotational Properties", (H. Quevedo and B. Mashhoon) in Relativity and Gravitation: Classical and Quantum, Proceedings of the 7th. Latin American Symposium on Relativity and Gravitations (Cocoyoc - Mexico, 1990), edited by J.C. D'Olivo, E. Nahmad - Achar, M. Rosenbaum, M. P. Ryan, Jr., L. F. Urrutia and F. Zertuche (World Scientific, Singapore, 1991) pp. 287 – 293.
3. "Linear transformations of the Einstein - Maxwell equations" (H. Quevedo), in SILARG VIII Proceedings of the 8th Latin American Symposium on Relativity and Gravitation: The Spacetime Structure (Águas Lindóia - Brasil, 1993), edited by P.S. Letelier and W.A. Rodrigues (World Scientific, Singapore, 1994), pp. 291 – 295.

4. "Dimensional reduction of the Einstein - Hilbert Lagrangian", (D. Núñez and H. Quevedo), in SILARG VIII Proceedings of the 8th Latin American Symposium on Relativity and Gravitation: The Spacetime Structure (Águas Lindóia - Brasil, 1993), edited by P.S. Letelier and W.A. Rodrigues (World Scientific, Singapore, 1994), pp. 162 – 166.
5. "A Numerical Kinetic Theory Approach for Two - Fluid Cosmological Models", (H. Harleston, H. Quevedo, and R. Sussman) in Proceedings of the Seventh Marcel Grossmann Meeting on General Relativity, (Stanford, California, 1994), edited by R. T. Jantzen and M. Keiser (World Scientific, Singapore, 1996) Part A pp. 705 – 707.
6. "Quantization of 2+1 Gravity on the Torus", (A. Criscuolo, H. Quevedo, and H. Waelbroeck) in Field Theory, Integrable Systems and Symmetries, Lectures from the Congress of the Canadian Association of Physicists (CAP), (Canada, 1995), edited by F. Khanna, and L. Vinet. (CRM, Montreal, Canada, 1997).
7. "Thermodynamics of Inhomogeneous Cosmological Models", (H. Quevedo, D. Rosales, and R.A. Sussman) in Proceedings of the First Mexican School on Gravitation and Mathematical Physics Recent Developments in Gravitation and Mathematical Physics (Guanajuato, Mexico, 1994), edited by A. Macias, T. Matos, O. Obregón and H. Quevedo (World Scientific, Singapore, 1996) pp. 321 - 330.
8. "Black Hole Hair: A Review", (D. Núñez, H. Quevedo and D. Sudarky) in Black Holes: Theory and Observation, Proceedings of the 179th W.E. Heraeus Seminar, ((Bad Honnef, Germany, 18–22 August 1997), edited by F. W. Hehl, C. Kiefer and R. J. K. Metzler (Springer Verlag, Germany, 1998) pp. 187 - 198.
9. "The Oscillating G Model: A Possible Explanation for the apparent Periodicity in the Galaxy Distribution and for the Cosmological Non-Baryonic Matter", (H. Quevedo, M. Salgado and D. Sudarsky) in Proceedings of the Eighth Marcel Grossmann Meeting on General Relativity (Israel, 1997) edited by T. Piran (World Scientific, Singapore 1999) Part B, pp 1444 - 1446.
10. "Generating Cosmological Solutions from known Solutions", (H. Quevedo and M.P. Ryan) in Mathematical and Quantum Aspects of Relativity and Cosmology Proceedings of the Second Samos Meeting on Cosmology, Geometry and Relativity (Samos, Greece, 1998) edited by S. Cotsakis and G. W. Gibbons (Springer, Germany 2000) pp. 191 - 213.
11. "The Big Bang in T^3 Gowdy cosmological models", (H. Quevedo), Proceedings of the Mexican Meeting on Exact Solutions and Scalar Fields in Gravity: Recent Development (Mexico City, México, 2000), edited by A. Macías, J.L. Cervantes - Cota, and C. Lämmerzahl eds. (Kluwer Academic/Plenum Publishers 2001) pp. 205 - 212.
12. "Periodicity in the Distribution of Galaxies and its Interpretation", (D. Sudarsky, M. Salgado, H. Quevedo and J. A. González), in Cosmology 2000 Conference Proceedings (Lisboa, Portugal, 2000) edited by M C. Bento, O. Bertolani, Teodoro, (World Scientific 2001) pp. 63 - 68.
13. "Does an Intrinsic Length Scale Generate Periodicity in the Distribution of Galaxies?", (J. A. González, H. Quevedo, M. Salgado and D. Sudarsky), Proceedings of the Ninth Marcel Grossman

Meeting on General Relativity, (Roma, 2000) edited by V. G. Gurzadyan, R. T. Jantzen (World Scientific, Singapore, 2001) Part C pp. 2085 - 2086.

14. "The field – to - particle transition problem", (J. Cortez, L. Patiño and H. Quevedo), in Developments in Mathematical and Experimental Physics Volume A: Cosmology and Gravitation Proceedings of the First Mexican Meeting on Mathematical and Experimental Physics, (México, 2001) edited by A. Macías, F. Uribe, E. Díaz (Kluwer Academic/Plenum Publishers, 2002) pp. 55 - 69.

15. "On time evolution in quantum Gowdy T^3 models", (A. Corichi, J. Cortez and H. Quevedo), Proceedings of the Fourth Mexican Workshop on Gravitation and Mathematical Physics, (Chapala, México, 2001) edited by N. Bretón, J. L. Cervantes - Cota and M. Salgado, (Revista Mexicana de Física, 49 Suplemento 2, 2003) pp. 106 - 110.

16. "Differential geometry and thermodynamics", (H. Quevedo and R. D. Zárate), in Proceedings of the Fourth Mexican Workshop on Gravitation and Mathematical Physics, (Chapala, México, 2001) edited by N. Bretón, J. L. Cervantes - Cota and M. Salgado, (Revista Mexicana de Física, 49 Suplemento 2, 2003) pp. 125 - 126.

17. "A method for generating Gowdy cosmological models" (Alberto Sánchez, Alfredo Macías and Hernando Quevedo) in Proceedings of the 5th Workshop of the Gravity and Mathematical Physics Division of the Mexican-Physical-Society, (Morelia, México, 2003) edited by M. Alcubierre, J. L. Cervantes–Cota, M. Montesinos, U. Nucamendi, V. Villanueva (Revista Mexicana de Física, 53 (2), Suplemento S 2007) pp. 110–114.

18. "Pioneer's Anomaly and the Solar Quadrupole Moment", (H. Quevedo), in Gravitation and Cosmology: 2nd. Mexican Meeting on Mathematical and Experimental Physics, (México, D. F. 2004) edited by A. Macías, C. Lämmerzahl and D. Núñez, (American Institute of Physics, AIP Conference Proceedings, Vol. 758, 2005) pp. 129 - 136.

19. "Supersymmetric quantization in midisuperspace", (A. Macías, H. Quevedo, A. Sánchez), in A Century of Relativity Physics XXVIII Spanish Relativity Meeting (ERE05, Oviedo, (Asturias) Spain, 6 - 10 Sep 2005), edited by L. Mornas, J. Díaz Alonso, (AIP Conf. Proc. **841**, 2006) pp. 599 - 602.

20. "Gowdy $T(3)$ cosmological models in $N=1$ supegravity", (A. Macías, H. Quevedo, A. Sánchez), in Albert Einstein Century International Conference, (Paris, France, 18 - 22 Jul 2005), edited by J. M. Alimi, A. Füzfa, (AIP Conf. Proc. **861**, 2006) pp. 953 - 960.

21. "Time paradox in Quantum Gravity", (Alfredo Macías and Hernando Quevedo), in Quantum Gravity Mathematical Models and Experimental Bounds (based on a Workshop on Mathematical and Physical Aspects of Quantum Gravity, Blaubeuren, Germany July 28th. - August 1st., 2005) edited by B. Fauser, J. Tolksdorf, E. Zeidler (Birkhäuser Verlag, 2007) pp. 41 - 60.

22. "Topological Spectrum of Classical Configurations" (F. Nettel and H. Quevedo), in XXVI Workshop on Geometric Methods in Physics, (Bialoweza, Poland 1 - 7 July, 2007), edited by P. Kielanowski, A. Odziejewicz, T. Voronov, (AIP Conf. Proc. **956**, 2007), pp. 9-14.

23. "The geometry of thermodynamics" (Hernando Quevedo and Alejandro Vázquez), in *Recent Developments in Gravitation and Cosmology: 3rd. Mexican Meeting on Mathematical and Experimental Physics*, (El Colegio Nacional, Mexico, D.F. 10 - 14 septiembre, 2007), edited by A. Macías, C. Lämmerzahl y A. Camacho, (AIP Conference Proceedings **977**, 2008), pp. 165 -172.
24. "Circular Motion in Reissner-Nordström Spacetime" (Daniela Pugliese, Hernando Quevedo and Remo Ruffini) in *Proceedings of the Twelfth Marcel Grossmann Meeting on General Relativity* (París, France July 12 – 18, 2009), edited by T. Damour, R.T. Jantzen, R. Ruffini (World Scientific Part B, 2012), pp. 1017 – 1021.
25. "Matching conditions in relativistic astrophysics" (Hernando Quevedo) in *Proceedings of the Twelfth Marcel Grossmann Meeting on General Relativity* (París, France July 12 – 18, 2009), edited by T. Damour, R.T. Jantzen, R. Ruffini (World Scientific Part A, 2012) pp. 35 – 52.
26. "Toward an Invariant Definition of Repulsive Gravity" (Orlando Luongo and Hernando Quevedo) in *Proceedings of the Twelfth Marcel Grossmann Meeting on General Relativity* (París, France July 12 – 18, 2009) edited by T. Damour, R.T. Jantzen, R. Ruffini (World Scientific Part B, 2012) pp. 1029 – 1031.
27. "Multipolar Solutions" (Hernando Quevedo) in *Cosmology and Gravitation XIVth Brazilian School of Cosmology and Gravitation* (Mangaratiba-Río de Janeiro, Brasil, agosto 30 – septiembre 11, 2010) edited by M. Novello and S. E. Perez Bergliaffa (Cambridge Scientific Publishers, 2011) pp. 83 – 97.
28. "Fundamentals of Geometrothermodynamics" (Hernando Quevedo and María N. Quevedo) in *The Mathematical Beauty of Symmetry Proceedings of the 2010 Zacatecas Workshop on Mathematical Physics II*, México (Zacatecas, México, diciembre, 2010), edited by V. V. Dvoeglazov, A. Molgado, C. Ortiz (Electronic Journal of Theoretical Physics, November 2011) pp. 1 – 16.
29. "Thermodynamics of topological black holes in Horava–Lifshitz gravity" (H. Quevedo, A. Sánchez and S. Taj) in *Proceedings of the 3rd. Italian-Pakistani Workshop on Relativistic Astrophysics (IPWRA2011)* (Lecce, Italy 20 – 22 june, 2011) edited by Francesco De Paolis and Azad A Siddiqui (*Journal of Physics: Conference Series* **354** 2012) 012015.
30. "A Geometric Approach to the Thermodynamics of the van der Waals System" (H. Quevedo, A. Ramírez) in *Proceedings of Mario Novello's 70th Anniversary Symposium*, edited by N. Pinto-Neto and S. E. Perez-Bergliaffa (2012) pp. 301-313.
31. "Cosmological implications of geometrothermodynamics" (O. Luongo and H. Quevedo) in *Proceedings of the Thirteenth Marcel Grossmann Meeting on General Relativity and Gravitation* (Stockholm, Sweden. July 1 – 7, 2013) edited by R. T. Jantzen, K. Rosquist (World Scientific Part B, 2015) pp. 1580 – 1582
32. "Constraints from cosmography in various parametrizations" (A. Aviles, C. Gruber, O. Luongo, and H. Quevedo) in *Proceedings of the Thirteenth Marcel Grossmann Meeting on General Relativity and Gravitation* (Stockholm, Sweden, July 1 – 7, 2013) edited by R. T. Jantzen, K. Rosquist (World Scientific Part B, 2015) pp. 1570 – 1573.

33. "Accretion disks around a mass with quadrupole" (M. Abishev, K. Boshkayev, H. Quevedo and S. Toktarbay) in Proceedings of the Twelfth Asia-Pacific International Conference on Gravitation, Astrophysics, and Cosmology edited by Vitaly N Melnikov and Jong-Ping Hsu (Moscow, Russia 28 Jun – 5 July 2015) Gravitation, Astrophysics, and Cosmology (World Scientific, 2016) pp. 185 -186.
34. "A perfect-fluid spacetime for a slightly deformed mass" (M. Abishev, K. Boshkayev, H. Quevedo and S. Toktarbay) in Proceedings of the Twelfth Asia-Pacific International Conference on Gravitation, Astrophysics, and Cosmology (Moscow, 28 Jun – 5 July 2015) Gravitation, Astrophysics, and Cosmology (World Scientific, 2016) pp. 246 – 247.
35. "Orbital stability of the restricted three-body problem in General Relativity" (M. Abishev, H. Quevedo, S. Toktarbay and B. Zhami) in Proceedings of the Twelfth Asia-Pacific International Conference on Gravitation, Astrophysics, and Cosmology (Moscow, Russia 28 Jun – 5 July 2015) Gravitation, Astrophysics, and Cosmology (World Scientific, 2016) pp. 187-188.
36. "A Newtonian Approach to the Cosmological Dark Fluids" (A. Aviles, J. L. Cervantes-Cota, J. Klapp, O. Luongo, H. Quevedo) in Selected Topics of Computational and Experimental Fluid Mechanics Edited by Klapp, J., Ruiz Chavarría, G., Medina Ovando, A., López Villa, A., Sigalotti, L.D.G. (Springer International Publishing Switzaerland, 2015) pp. 527 – 539.
37. "Geometric approaches to the thermodynamics of black hole" (Christine Gruber, Orlando Luongo, Hernando Quevedo) in Proceedings of the Fourteenth Marcel Grossman Meeting on General Relativity (12-18 Jul 2015. Rome, Italy) edited by Massimo Bianchi, Robert T Jantzen, Remo Ruffini (World Scientific, Singapore, 2016) pp. 453 – 466.
38. "Black hole geometrothermodynamics" (Hernando Quevedo) in Proceedings of 70 & 70 Gravitation Fest (28 – 30 september 2016 Cartagena, Colombia) edited by A. C. Gutiérrez-Piñeres, E. A. Montoya and L.A. Núñez, (Journal of Physics: Conf. Series 831, 2017) 012005.
39. "Geometrothermodynamics of the Ideal Gas" (Abishev, M., Malybayev, A., Quevedo, H.) News of The National Academy of Sciences of the Republic of Kazakhstan-Series Physico-Mathematical, 2 pp. 64-68 (2017).
40. "Can spacetime curvature be used in future navigation systems?" (Hernando Quevedo) Proceedings of the conference "Relativistic geodesy" (Bad Honnef, Germany 2016) Relativistic Geodesy Foundations and Applications edited by Dirk Puetzfeld, Claus Lämmerzahl (Fundamental Theories of Physics Volume 196 Springer Nature Switzerland, 2019) pp. 379-392.
41. "Killing horizons, throats and bottlenecks in the ergoregion of the Kerr spacetime" (D. Pugliese and H. Quevedo) Proceedings of 15th Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Astrophysics, and Relativistic Field Theories (MG15) (1-7 Jul 2018 Rome, Italy) edited by Elia Battistelli, Robert T. Jantzen, and Remo Ruffini (World Scientific, Singapore)
42. "On Some Effects in the Structure of White Dwarfs" (B. A. Zhami, K. Boshkayev, H. Quevedo and Zh. A. Kalymova) *News of the National Academy of Sciences of the Republic of Kazakhstan-Series Physico-Mathematical* **6**, 328 pp. 80-89 (2019).

43. "On the metric bundles of axially symmetric spacetimes" (Daniela Pugliese and Hernando Quevedo) in Proceedings of RAGtime 17–19: Workshops on black holes and neutron stars 17–19/23–26 Oct., 1–5 Nov., 2015/2016/2017, Opava, Czech Republic, Z. Stuchlík, G. Török and V. Karas, editors, Silesian University in Opava, 2017, pp. 125–134

III. CHAPTERS IN BOOKS

1. "Quadrupolar Metrics" (Hernando Quevedo) in Neutron Stars: Physics Properties and Dynamics, Editors: Nurgali Takibayev and Kuantay Boshkayev (Physical-Technical Department, al-Farabi Kazakh National University, Almaty, Republic of Kazakhstan) Series: Physics Research and Technology ISBN: 978-1-53610-525-4 (2017).

2. "Ellipsoidal Spacetimes and the Kerr Metric" (Hernando Quevedo) in Encyclopedia of Geodesy, Editor: Grafarend E. Encyclopedia of Earth Sciences Series. Springer, Cham. Online ISBN 978-3-319-02370-0 (2020).

Updated: April 2022