

Alejandro Corichi

Publication List

- [1] On the measure problem in slow roll inflation and loop quantum cosmology,
A. Corichi and A. Karami.
Preprint arXiv:1010.4249 [gr-qc].
- [2] Surface terms, asymptotics and thermodynamics of the Holst action,
A. Corichi and E. Wilson-Ewing.
Published in *Class. Quant. Grav.* **27**, 205015 (2010).
Preprint arXiv:1005.3298 [gr-qc]. **4 citations**
- [3] A geometric perspective on singularity resolution and uniqueness in loop quantum cosmology,
A. Corichi and P. Singh.
Published in *Phys. Rev. D* **80**, 044024 (2009).
Preprint arXiv:0905.4949 [gr-qc]. **12 citations**
- [4] Semiclassical quantum gravity: Obtaining manifolds from graphs.
L. Bombelli, A. Corichi and O. Winkler.
Published in *Class. Quant. Grav.* **26**, 245012 (2009).
Preprint arXiv:0905.3492 [gr-qc].
- [5] Is loop quantization in cosmology unique?
A. Corichi and P. Singh.
Published in *Phys. Rev. D* **78**, 024034, 2008.
Preprint arXiv:0805.0136v2 [gr-qc]. **43 citations**
- [6] On the geometry of quantum constrained systems,
A. Corichi.
Published in *Class. Quantum Grav.* **25** 135013, 2008.
Preprint arXiv:0801.1119v1 [gr-qc]. **5 citation**
- [7] Quantum bounce and cosmic recall,
A. Corichi and P. Singh.
Published in *Phys. Rev. Lett.* **100**, 161302, 2008.
Preprint arXiv:0710.4543v2 [gr-qc]. **30 citations**
- [8] Robustness of key features of loop quantum cosmology,
A. Ashtekar, A. Corichi and P. Singh.
Published in *Phys. Rev. D* **77**, 024046, 2008.
Preprint arXiv:0710.3565v1 [gr-qc]. **73 citations**
- [9] Quantum structure of geometry: Loopy and fuzzy?,
A. Corichi and J.A. Zapata.
Published in *Int. Jour. Mod. Phys. D* **17**, 445-451, 2008.
Preprint arXiv:0705.2440v1 [gr-qc]. **5 citation**

- [10] Quantum Gowdy T^3 model: Schrödinger Representation with unitary dynamics,
A. Corichi, J. Cortez, G. Mena Marugán and J. Velhinho.
Published in *Phys. Rev.* **D76**, 124031, 2007.
Preprint arXiv:0710.0277v1 [gr-qc]. **11 citation**

- [11] Polymer quantum mechanics and its continuum limit,
A. Corichi, T. Vukašinac and J.A. Zapata.
Published in *Phys. Rev.* **D76**, 044016, 2007.
Preprint arXiv:0704.0007v1 [gr-qc]. **21 citations**

- [12] Hamiltonian and physical Hilbert space in polymer quantum mechanics,
A. Corichi, T. Vukašinac and J.A. Zapata.
Published in *Class. Quantum Grav.* **24**, 1495-1512, 2007.
Preprint Archive: gr-qc/0610072. **12 citation**

- [13] Black hole entropy quantization,
A. Corichi, J. Díaz-Polo and E. Fernández-Borja.
Published in *Phys. Rev. Lett.* **98**, 181301, 2007.
Preprint Archive: gr-qc/0609122. **23 citations**

- [14] Entropy counting for microscopic black holes in LQG,
A. Corichi, J. Díaz-Polo and E. Fernández-Borja.
Published in *Class. Quantum Grav.* **24**, 243-251, 2007.
Preprint Archive: gr-qc/0605014. **31 citation**

- [15] Quantum Gowdy T^3 model: A uniqueness result,
A. Corichi, J. Cortez, G. Mena Marugán and J. Velhinho.
Published in *Class. Quantum Grav.* **23**, 6301-6319, 2006.
Preprint Archive: gr-qc/0607136. **20 citations**

- [16] Quantum Gowdy T^3 model: A unitary description,
A. Corichi, J. Cortez and G. Mena Marugán.
Published in *Phys. Rev.* **D73**, 084020, 2006.
Preprint Archive: gr-qc/0603006. **22 citations**.

- [17] Unitary evolution in Gowdy cosmology,
A. Corichi, J. Cortez and G. Mena Marugán.
Published in *Phys. Rev.* **D73**, 041502, 2006.
Preprint Archive: gr-qc/0510109. **20 citations**.

- [18] Scalar hairy black holes and scalarons in the isolated horizons formalism,
A. Corichi, U. Nucamendi and M. Salgado,
Published in *Phys. Rev.* **D73**, 084002, 2006.
Preprint Archive: gr-qc/0504126. **2 citation**.

- [19] Quantum superposition principle and geometry.
A. Corichi.
Published in *Gen Rel. Grav.* **38**, 677-687, 2006.
Preprint Archive: quant-ph/0407242. **3 citation**.

- [20] On a puzzle of Bremsstrahlung as described by coaccelerated observers,
 I. Peña, C. Chyssomalakos, A. Corichi and D. Sudarsky.
 Published in *Phys. Rev.* **D72**, 084018, 2005.
 Preprint Archive: gr-qc/0507040. **1 citation.**
- [21] Generalized harmonic spatial coordinates and hyperbolic shift conditions,
 M. Alcubierre, A. Corichi, J.A. González, D. Núñez, M. Salgado and B. Reimann.
 Published in *Phys. Rev.* **D72**, 124018, 2005.
 Preprint Archive: gr-qc/0507007. **4 citations.**
- [22] Semiclassical states for constrained systems.
 A. Ashtekar, L. Bombelli and A. Corichi,
 Published in *Phys. Rev.* **D72**, 025008, 2005.
 Preprint Archive: gr-qc/0504052. **29 citations.**
- [23] Towards a new approach to quantum gravity phenomenology,
 A. Corichi and D. Sudarsky.
 Published in *Int. Jour. Mod. Phys.* **D14**, 1685-1698, 2005.
 Preprint Archive: gr-qc/0503078. **21 citations.**
- [24] Semiclassical Quantum Gravity: Statistics of Combinatorial Riemannian Geometries.
 L. Bombelli, A. Corichi, O. Winkler.
 Published in *Annalen der Physik (Leipzig)* **14**, 499-519, 2005.
 Preprint Archive: gr-qc/0409006. **17 citations.**
- [25] Schrödinger and Fock Representation for a Field Theory on Curved Spacetime.
 A. Corichi, J. Cortez, H. Quevedo.
 Published in *Annals of Physics (NY)*, **313**, 446, 2004.
 Preprint Archive: hep-th/0202070. **19 citations.**
- [26] Semiclassical States in Quantum Cosmology: Bianchi I Coherent States.
 B. Bolen, L. Bombelli and A. Corichi.
 Published in *Class. Quantum Grav.* **21**, 4087, 2004.
 Preprint Archive: gr-qc/0404004. **7 citations.**
- [27] Comments on area spectra in Loop Quantum Gravity.
 A. Corichi.
 Published in *Rev. Mex. Fis.* **50**, 549-552, 2004.
 Preprint Archive: gr-qc/0402064. **8 citations.**
- [28] Note on Self-duality and the Kodama State.
 A. Corichi and J. Cortez.
 Published in *Phys. Rev.* **D69**, 047702, 2004.
 Preprint Archive: hep-th/0311089. **3 citations.**
- [29] Black Holes in de Sitter: Masses, Energies and Entropy Bounds.
 A. Corichi and A. Gomberoff.
 Published in *Phys. Rev.* **D69**, 064016, 2004.
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- [30] Non-minimal couplings, quantum geometry and black hole entropy
A. Ashtekar and A. Corichi.
Published in *Class. Quantum Grav.* **20**, 4473-4484, 2003.
Preprint Archive: gr-qc/0305082. **23 citations**.
- [31] Non-minimally coupled scalar fields and isolated horizons
A. Ashtekar, A. Corichi and D. Sudarsky.
Published in *Class. Quantum Grav.* **20**, 3413-3425, 2003.
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- [32] A hyperbolic slicing condition adapted to Killing fields and densitized lapses.
M. Alcubierre, A. Corichi, J.A. Gonzalez, D. Nunez, M. Salgado.
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Preprint archive: gr-qc/0303069. **10 citations**.
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Published in *Phys. Rev.* **D67**, 104021, 2003.
Preprint archive: gr-qc/0303086. **6 citations**.
- [34] Quasinormal modes, black hole entropy, and quantum geometry.
A. Corichi.
Published in *Phys. Rev.* **D67**, 087502, 2003.
Preprint Archive: gr-qc/0212126. **72 citations**.
- [35] Note on canonical quantization and unitary equivalence in field theory.
A. Corichi, J. Cortez, H. Quevedo.
Published in *Class. Quantum Grav.* **20** L83-L93, 2003.
Preprint Archive: gr-qc/0212023. **6 citations**.
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A. Corichi, J. Cortez, H. Quevedo.
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Preprint Archive: gr-qc/0207088. **9 citations**.
- [37] On unitary time evolution in Gowdy T^3 cosmologies.
A. Corichi, J. Cortez, H. Quevedo.
Published in *Int. Jour. Mod. Phys.* **D11**, 1451, 2002.
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A. Corichi, M.P. Ryan, D. Sudarsky.
Published in *Mod. Phys. Lett.* **A17**, 555-567, 2002.
Preprint Archive: gr-qc/0203073. **2 citations**.
- [39] Quantum Collapse of a Small Dust Shell.
A. Corichi, G. Cruz, A. Minzoni, P. Padilla, M. Rosenbaum, M.P. Ryan, N.F. Smyth, T.

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A. Corichi and D. Sudarsky.
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A. Corichi, U. Nucamendi and D. Sudarsky.
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- [42] Hairy Black Holes, Horizon Mass and Solitons
A. Ashtekar, A. Corichi and D. Sudarsky.
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- [43] A Gaussian Weave for Kinematical Loop Quantum Gravity.
A. Corichi and M. Reyes.
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- [44] Einstein-Yang-Mills Isolated Horizons: Phase Space, Mechanics, Hair and Conjectures.
A. Corichi, U. Nucamendi and D. Sudarsky.
Published in *Phys. Rev.* **D62**, 044045, 2000.
Preprint Archive: gr-qc/0002078. **37 citations**.
- [45] Mass of Colored Black Holes.
A. Corichi and D. Sudarsky.
Published in *Phys. Rev.* **D61**, 101501, 2000.
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- [46] Laws Governing Isolated Horizons: Inclusion of Dilaton Couplings.
A. Ashtekar and A. Corichi.
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- [47] The effect of low momentum quantum fluctuations on a coherent field structure.
G. Cruz, A. Minzoni, P. Padilla, A. Corichi, M. Rosenbaum, M.P. Ryan, N.F. Smyth.
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- [48] Isolated Horizons: The Classical Phase Space.
A. Ashtekar, A. Corichi and K. Krasnov.
Published in *Adv. Theor. Math. Phys.* **3**, 419-478, 2000.
Preprint Archive: gr-qc/9905089. **86 citations**.

- [49] On a Spacetime duality in $2+1$ Gravity.
 A. Corichi and A. Gomberoff.
 Published in *Class. Quantum Grav.* **16**(11), 3579-3598, 1999.
 Preprint Archive: gr-qc/9906078. **7 citations.**
- [50] Reflections on the Geometrical Approach to Quantum Mechanics applied to Cosmology.
 A. Corichi and M.P. Ryan.
 Published in *Gen. Rel. Grav.* **31**, 621-628, 1999. **0 citations.**
- [51] Edge States and Black Hole Entropy.
 A. Corichi.
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- [52] Quantum theory of geometry III: non-commutativity of Riemannian structures
 By A. Ashtekar, A. Corichi, and J. Zapata.
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- [54] Quantum Geometry and Black Hole Entropy.
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- [55] On diffeomorphism invariance for lattice theories.
 A. Corichi and J. A. Zapata.
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- [56] Gauss linking number and electromagnetic uncertainty principle.
 By A. Ashtekar and A. Corichi.
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- [57] Quantization of non-standard Hamiltonian systems.
 By A. Corichi and M.P. Ryan
 Published in *J. Phys.* **A30**, 3553-3572, 1997.
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- [59] Gravity and Geometric Phases.
By A. Corichi and M. Pierri.
Published in *Phys. Rev.* **D51**, 5870-5875, 1995. **22 citations**.
- [60] Comment on Hamiltonian Theory of a System with Constraints.
By A. Corichi.
Published in *Jour. Math. Phys.* **33**, 4066, 1992. **7 citations**.

Proceedings and Book Chapters

- [61] On The Convergence In Effective Loop Quantum Cosmology,
A. Corichi, T. Vukašinac and J.A. Zapata.
Published in *AIP Conf. Series* **1256**, 172 (2010).
- [62] Black Holes and Entropy in Loop Quantum Gravity,
A. Corichi.
Published in *Advanced Science Letters* **2**, 236-243 (2009).
Preprint arXiv:0901.1302 [gr-qc].
- [63] Black holes in loop quantum gravity: Recent advances,
A. Corichi.
Published in *J. Phys. Conf. Ser.* **D140**, 012006 (2008) (Proceedings of the ICGC 07 Conference).
- [64] On a continuum limit for loop quantum cosmology,
A. Corichi, T. Vukašinac and J.A. Zapata.
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A. Corichi
Published in *J. Phys.: Conf. Ser.* **24**, 1-22 (2005),
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Preprint Archive: gr-qc/0507038. **9 citations**.
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- [68] Hair from the Isolated Horizon Perspective.
A. Corichi and D. Sudarsky.

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- [69] Gaussian Weaves: New results.
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- [70] Geometry in Color Perception.
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