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EDUCATION:

PhD in Physics, Purdue University, August 1989. Thesis Topic: Constraints on intermediate range New Forces from the Neutral Kaon System.

B.S. Double Major : Physics and Mathematics, Hebrew University of Jerusalem, Israel, July 1981

WORK EXPERIENCE:

Visiting Scholar, Philosophy Department University of Nueva York (NYU), New York, USA , January - Octubre 2018.

Profesor Invitado, Instituto de Astronomía y Física del Espacio, (IAFE), Universidad de Buenos Aires, Buenos Aires, Argentina, July 25, 2010- June 24 2011.

Invited Professor, Centre de Physique Theorique, University of Marseille, Luminy, France, March-April 2008.

Visiting Scientist, Center for Gravitational Physics and Geometry, Pennsylvania State University, State College, Pennsylvania, September 2002 - August 2003.

Head of the Gravitation and Field Theory Department, Nuclear Sciences Institute, UNAM February 2001-August 2002.

Full Professor, Gravitation and Field Theory Department, Nuclear Sciences Institute, UNAM October 2000 - .

Associate Professor, Gravitation and Field Theory Department, Nuclear Sciences Institute, UNAM October 1997 - October 2000.

Assistant Professor, Gravitation and Field Theory Department, Nuclear Sciences Institute, UNAM September 1994 - October 1997.

Research Professor, Physics Department, Universidad Autónoma de Sto. Domingo, Santo Domingo, Dominican Republic. March 1994 - August 1994.

Research Professor, Physics and Mathematics Department, Pontificia Universidad Católica Madre y Maestra, Sto. Domingo, Dominican Republic. August 1992 -March 1994.

Visiting Scholar, Enrico Fermi Institute, University of Chicago, Chicago, Illinois, USA September 1990 - July 1992.

WORK IN REFERRED JOURNALS

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(10) "Unruh-DeWitt Detectors in the Presence of Scalar Sources", G.E.A. Matsas and D. Sudarsky, *Modern Physics Letters A*. Vol 9, No 36, 3325, (1994).

(11) "A Simple Proof of a No Hair Theorem in Einstein Higgs Theory", D. Sudarsky, *Classical and Quantum Gravity* **12**, 579, (1995).

(12) "Time Dependent Perturbation Theory and the Zeldovich Electric Dipole Moment in Atoms", D.Tadic, D. E. Krause, E. Fischbach and D. Sudarsky, *Fizika B* **4**, No 3, 259, (1995).

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- (79) “Measurements according to the ‘Consistent Quantum Theory’” Elias Okon & Daniel Sudarsky, *Studies in History and Philosophy of Modern Physics*, **48**, Part A, , 7-12, (2014).
- (80) “The Black Hole Information Paradox and the Collapse of the Wave Function” Elias Okon & Daniel Sudarsky. *Foundations of Physics* **45**, Issue 4, 461-470 (2015).
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- 82) “Origin of structure: Statistical characterization of the primordial density fluctuations and the collapse of the wave function” Gabriel León & Daniel Sudarsky, *JCAP* **06**, 020 (2015).
- 83) “ Non-Paradoxical Loss of Information in of Black hole evaporation in Collapse theories” Sujoy Modak, Leonardo Ortiz, Igor Peña & Daniel Sudarsky, *Physics Review D* **91**, 12, 124009 (2015).
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- 86) “The Consistent Histories Formalism and the Measurement Problem” E. Okon, & D. Sudarsky *Studies in History and Philosophy of Modern Physics***52**, pg 217-222 (2015); ArXiv:1504.03231 quant-ph.
- 87) “Comment on ” Universal decoherence due to gravitational time dilation” Yuri Bonder, Elias Okon & Daniel Sudarsky *Nature* **12**, 2, (2016).
- 88) ”Less Decoherence and More Coherence in Quantum Gravity, Inflationary Cosmology and Elsewhere”, E. Okon, & D. Sudarsky, *Foundations of Physics* **46**(7), 852-879, (2016).
- 89) “Relativistic collapse dynamics and black hole information loss” Daniel Bedingham, Sujoy K. Modak, & Daniel Sudarsky *Physics Review D*, **94** no.4, 045009 (2016); e-Print: arXiv:1604.06537 [gr-qc].
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- (93) “Interpretations of Quantum Theory in the Light of Modern Cosmology”, Mario Castagnino, Sebastian Fortin, Roberto Laura & Daniel Sudarsky, *Foundations of Physics*, Volume 47, Issue 11, 1387-1422, (2017); arXiv:1412.7576 [gr-qc].

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- (98) “Revisiting Higgs inflation in the context of collapse theories”, Saul Rodriguez & Daniel Sudarsky, *JCAP* **03**, 006 (2018); arXiv:1711.04912-v2 [gr-qc].
- (99) “Equivalence Principle in Chameleon Models” Lucila Kraiselburd, Susana J. Landau, Marcelo Salgado, Daniel Sudarsky, Héctor Vucetich. *Physics Review D* **97**, 104044 (2018); arXiv:1511.06307 [gr-qc].
- (100) “Extracting Geometry from Quantum Spacetime: Obstacles down the road” Yuri Bonder, Chryssomalis Chryssomalakos, & Daniel Sudarsky, *Foundations of Physics*, pg. 1, (2018); arXiv:1706.08221 [gr-qc].
- (101) “Expectation of primordial gravity waves generated during inflation” Gabriel León, Abhishek Majhi, Elias Okon, & Daniel Sudarsky. *Physics Review D* **98** no.2, 023512 (2018); arXiv:1712.02435 [gr-qc].
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- (103) “A microscopic model for an emergent cosmological constant” Alejandro Perez, Daniel Sudarsky & James D. Bjorken, second place in the essay contest of the GRAVITY RESEARCH FOUNDATION 2018. In press in *International Journal of Modern Physics D*.
- (104) “Semiclassical Self Consistent Treatment of the Emergence of Seeds of Cosmic Structure. The second order construction”, Pedro Cañate, Erandy Ramirez, & Daniel Sudarsky. *JCAP* **043** no.08, 1808 (2018); arXiv:1802.02238 [gr-qc].
- (105) “Constraining quantum collapse inflationary models with current data: The semiclassical approach”, María Pía Piccirilli, Gabriel León, Susana J. Landau, Micol Benetti, & Daniel Sudarsky, in press in *International Journal of Modern Physics D*; arXiv:1709.06237 [astro-ph.CO].

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- (1) “The Fifth Force”, E. Fischbach, D. Sudarsky, A. Szafer, C. Talmadge, and S. H. Aronson, *Proceedings of the XXII International Conference on High Energy Physics*, Berkeley, July 1986, eds. S. C. Loken (World Scientific, Singapore, 1987), pg. 1021-1031.
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Ph. D. STUDENTS:

Ulises Nucamendi (degree on February 2000); José Antonio González Cervera (degree on August 2004); Igor Peña Ibarra (degree on November 2007); Adolfo de Unanue (degree on January 2010); Yuri Bonder Grimberg, (degree on November 2010); Gabriel León García, (degree on March 2011); Pedro Canate (degree on December 2015).

OTHER ACADEMIC ACTIVITIES

258 scientific talks, participation in 119 scientific conferences, 59 general public talks, 15 general public individual articles, newspaper scientific popularization column (2 years), one web-newspaper scientific column (8 months).

Administrative Activities and Participation on Collegial Committees

Organization of the Student Seminar at Institute for Nuclear Sciences UNAM.

Organization and participation in multiple Opened Door Days at Institute for Nuclear Sciences UNAM.

Participation on the commission for the de restructuring of the Graduate Program of Physical Sciences of the UNAM.

Organization of the VI Anual Meeting of the Division of Gravitation and Mathematical Physics of the Mexican Physical Society.

Representative in the Institute Internal Council of the Department of Gravitation and Field Theory, at the Institute for Nuclear Sciences UNAM, 1999 - January 2001.

Head of the Department of Gravitation and Field Theory of the Institute for Nuclear Sciences UNAM, February 2001 - August 2002.

Organization of the Departmental Seminar of the Department of Gravitation and Field Theory of the Institute for Nuclear Sciences UNAM.

Organization of the Informal Seminar of the Department of Gravitation and Field Theory of the Institute for Nuclear Sciences UNAM.

Participation on the Evaluation Committee for the projects “Cátedra de Investigación” of the UNAM FES- Cuahutitlán, February 2004.

Participation in the organizing committee of the event “La Feria de la Física” UNAM, 2004-2005.

Participation in the organization of the "First Mexican Meeting on the Space-time Micro-structure in Light of the Nature of the Matter Probes", Pátzcuaro Michoacan, México, November 2006.

Participation, as representative of the director of the Nuclear Sciences Institute, on the Academic Committee For the Graduate Program on Physical Sciences UNAM, October 2006-June 2008.

Member of the Local Organizing Committee of the 19th International Conference on General Relativity and Gravitation, July 5 to 9 2010, México D.F, México.

Member of the Awards and Prizes Committee of the Mexican Sciences Academy 2009-2011.

ACADEMIC SOCIETIES, DISTINCTIONS AND JOURNALS

"David Ross Fellowship", Purdue University (1986-1988); "Phi Kappa Phi Honor Society"; "Sigma Pi Sigma Physics Honor Society"; "The American Physical Society"; Regular Member of the Mexican Academy of Sciences; **Member of the Editorial Board of the Journals** *Classical and Quantum Gravity* IOP and *Mathematical Physics* (ISRN); **Member of the scientific Council** of "ICTP-South American Institute for Fundamental Research". (jointly run by the "International Center for theoretical Physics (ICTP)", Trieste, Italy and the "Universidad Estadual do Sao Paulo (UNESP)" San Pablo Brazil.

Referee for the following journals: *Nature-Physics*, *Physical Review Letters*, *Physics Review D*, *Physics Letters B*, *Classical and Quantum Gravity*, *Advances in Theoretical and Mathematical Physics*, *Advances in High Energy Physics*, *Foundations of Physics*, *Journal of Physics A: Mathematical and Theoretical*, *Annalen der Physik*, *General Relativity and Gravitation*, *International Journal of Modern Physics A*, *International Journal of Modern Physics D*, *Modern Physics Letters A*, *Experimental Astronomy*. and *Revista Mexicana de Física*.

Referee of research projects for CONACYT (México), DGAPA (México), COLCIENCIAS (Colombia), and FONDECYT (Chile) "Natural Sciences and Engineering Research Council of Canada" (NSERC) (Canada) & Research Foundation - Flanders (Fonds Wetenschappelijk Onderzoek - Vlaanderen, FWO, Belgium)

Nivel III del SNI (Highest level of the Mexican National System of Researchers or SNI).

Full Research Professor (Titular C) tenured, at the Institute for Nuclear Sciences, UNAM

Marcos Moshinsky Medal (Mexican Price in Theoretical Physics) 2004.

Over 4100 bibliographic citations (according to Google Scholar) .