Honors and Awards.

_ 2013 Panunzio distinguished emeriti award
_ 2001 Visiting scholar at the Rockefeller Foundation Center, Bellagio, Como, Italy
_ 1995-6 Van der Waals visiting Professor at the University of Amsterdam
_ 1989-90 Alexander von Humboldt Fellowship
_ 1970 Fellow of the American Physical Society
1964-66, A.P. Sloan Fellowship
_ 1963-64, J.S. Guggenheim Fellowship

Publications in History of Science (1994-2016)

1) "Newton's Early Computational Method for Dynamics",
Archives for History of Exact Sciences, **46,** (1994) 221-252.

2) "Newton's Principia and Inverse-Square Orbits*",*
The College Mathematics Journal, (May 1994) 212-221

3) "Hooke, Orbital Motion and Newton's Principia",
American Journal of Physics, **62**, (1995) 331-350.

4) "Newton and Huygens on Curvature and its Applications to Dynamics", Special issue on Christiaan Huygens in the Dutch Journal *De zeventiende eeuw. Cultuur in de Nederlanden in Interdisciplinair Perspectief*, (Sept. 1996) 215-234.

5) "The Mathematical Principles Underlying the *Principia* Revisited",
Journal for History of Astronomy **29**, (1998) 286-300.

6) "Newton's unpublished perturbation method for the lunar motion",
International Journal of Engineering Science **36** (1998) 1391-1405

7) "Newton's curvature measure of force",
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8) Comment on "An analysis of Newtons Projectile diagram",
European Journal of Physics **21** (2000) L5-6

9) "Newton's perturbation methods and its application to Lunar motion", *Isaac Newton's Natural Philosophy*, edited by I. B. Cohen and J. Buchwald (MIT Press, 2001)

10) “Curvature in Newton's Dynamics” (with J. Brackenridge), *Cambridge Companion to Newton,* edited by I. B. Cohen and G. Smith (Cambridge, 2002)

11) “Kepler's Area Law in The Principia: Filling in some details in Newton's proof of Proposition 1”, *Historia Mathematica* **30** (2003) 441-456

12) M. Nauenberg, “Gap in Einstein’s early argument for existence of photons”, *Physics Today*, October 2005

13) “Hooke’s and Newton’s contributions to the early development of orbital dynamics and the theory of universal gravitation”, *Early Science and Medicine* **X** (2005), 518-528

14) “Curvature in Orbital Dynamics”, *American Journal of Physics* **73** (2005), 340-348

15), “Robert Hooke’s seminal contributions to orbital dynamics”, *Physics in Perspective* **7** (2005), 4-34 and Robert Hooke, *Tercentennial Studies*, eds. M. Cooper and M. Hunter (Ashgate, London 2006), 3-32

16) “How Einstein discovered the Photon”, *History of Physics Newsletter* ***9*****,** (2006), 18-19

17) “Edmund C. Stoner and the discovery of the maximum mass of white dwarfs”, *Journal for the History of Astronomy* 39, (2008) 297-312
Synopsis in *History of Physics Newsletter* **10** (2008), 9

“Mermin habitually answers questions real and abstract”
Physics Today 62, 9, 10 (2009)

18) “The early application of the calculus to the inverse square force problem”, *Archive for History of Exact Sciences* ***64*** *(2010) 269-300*

“Placing Chandra’s work in historical Context”
Physics Today 64, Issue 7, (2011) 8

19) “Proposition 10, Book 2, in the Principia, revisited”, *Archive for History of Exact Sciences* **65** (2011) 567-587

20) “Comment on `Is Newton’s second law really Newton’s?’”, *American Journal of Physics* **80** (2012) 931-933

21) “Barrow and Leibniz on the Fundamental Theorem of the Calculus”, Submitted to *Annals of Science* **71** (July 2014) 335-354

22) ``Orbital motion and force in Newton’s Principia; the equivalence of the descriptions in Propositions 1 and 6.”

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23 “My early work in the history of Physics”,
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24) “What happened to the Bohr-Sommerfeld elliptic orbits in Schrodinger’s wave mechanics?”
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25) “Solution to the Long Standing Puzzle of Huygens’ Anomalous Suspention”, Archives History of Exact Sciences, April 2015 (online)

26 “John Bell’s major contributions to Physics and Philosophy”
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27) “Max Planck and the Birth of the Quantum Hypothesis”
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28) M. Nauenberg, “Recollections of John Bell” Chapter in a tribute to John Bell (Cambridge Univ Press)

Publication in Physics (1994-2016)

1) Comment on ‘‘Suppose Newton had invented wave mechanics,’’ by Willis E. Lamb, Jr. [Am. J. Phys. **62**, 201–206 (1994)]

2) Reply to “Comment on ‘Hot gases: The transition from line spectra to thermal radiation,’” by M. Vollmer [Am. J. Phys. 73 (3), 215–223 (2005)]

3) Curvature in orbital dynamics
American Journal of Physics **73**, 340 (2005);

4) The evolution of radiation toward thermal equilibrium: A soluble model that illustrates the foundations of statistical mechanics
American Journal of Physics **72**, 313 (2004)

5)Violation of an inequality in an experimental test of Leggett’s non-local hidden variable theory
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6) Does quantum mechanics require a conscious observer?
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7) Comment on "Is Newton's second law really Newton's?" by Bruce Pourciau [Am. J. Phys. 79(10), 1015–1022 (2011)]
American Journal of Physics **80**, 931 (2012);

8) Perturbation approximation for orbits in axially symmetric funnels
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9) Comment on "There are no particles, there are only fields," by Art Hobson [Am. J. Phys. 81, 211–223 (2013)]
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10) Comment on "Pointy ice-drops: How water freezes into a singular shape" [Am. J. Phys. 80, 764–771 (2012)]
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11 Is Bohm's Interpretation consistent with Quantum Mechanics?"
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12) QBism and Locality in Quantum Mechanics
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13) "Einstein's Equivalence Principle in Quantum Mechanics revisited"
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14) " Atmospheric Refraction predictions based on Atmospheric Pressure and Temperature data", Publications of the Astronomical Society of the Pacific, 129:044503(6pp.)2017

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Measured responses to quantum Bayesianism
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Physics Today 66, Issue 4, 10 (2013)

Readers offer their own magic moments with John Bell
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Approaches to Studying our History
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Responses to: Steven Weinberg and the Puzzle of Quantum Mechanics
By N. D. Mermin, J. Bernstein, M. Nauenberg and J. Bricmon and S. Goldstein
The New York Review of Books, April 6. 2017 (online)

Book on History of Science

The Foundations of Newtonian Scholarship, edited by R. Dalitz and M. Nauenberg (*World Scientific*, 2000).

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M. Nauenberg " *Newton’s Celestial Mechanics and the theory of Gravitation* ", in a three volume edition on “*The Reception of Newton’s Principia*”, edited by H. Pulte and S. Mandelbrooke (to be published in 2017)

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Nauenberg (*World Scientific*, 2000) 59-69

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equivalent arithmetic method", in *The Foundations of Newtonian Scholarship*, edited by
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Reply to Gal in Readers' Forum of *Physics Today*, August 2004, entitled "Hooke, Newton and the Trials of Historical Examination"

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J.B. Brackenridge " The Key to Newton's Dynamics" and
D. Densmore, "The Central Argument"
Journal of History of Astronomy XXIX (1998) 287-299

S. Chandrasekhar, "Newton's Principia for the Common Reader"
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