CURRICULUM VITAE

PERSONAL

Name: Robert J. Deltete Date of Birth: December 21, 1946

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EDUCATION

1976 - 1978 Yale University, New Haven, Connecticut

Doctoral Dissertation Topic: "The Energetics Controversy in Late Nineteenth-Century Germany: Helm, Ostwald and Their Critics"
Directors: Drs. Ruth B. Marcus and Martin J. Klein. Ph.D. conferred in May, 1983

1976 Yale University, New Haven, Connecticut
M.Phil. (ABD) in Philosophy and History of Science and Medicine

1974 - 1975 Yale University, New Haven, Connecticut
M.A. in History of Science and Medicine

1973 - 1974 Yale University, New Haven, Connecticut
M.A. in Philosophy

1965 - 1969 Seattle University, Seattle, Washington
B.A. in Philosophy and History (*summa cum laude*); minor in Physics

MILITARY SERVICE

1969 - 1973 U.S. Navy (Reserve)
Discharge Rank: Lieutenant
Service: USS E.F. LARSON (DD-830), West Coast, U.S.A. and Vietnam
Responsibilities: CIC/Operations Officer, Intelligence Officer
Clearance: Top Secret/Cryptographic
Discharge Billet: Operations Officer

Awards: Navy Commendation Medal, Navy
Achievement Medal, CINCPACFLT Unit
Commendation, Combat Action Ribbon

TEACHING EXPERIENCE

Seattle University

Professor, Philosophy, 1996-present
Associate Professor, Philosophy, 1989-1995
Assistant Professor, Philosophy, 1981-1988
Instructor, Philosophy, 1978 - 1980

Courses - Department of Philosophy

Pl 110: Introduction to Philosophy and Critical Thinking
Pl 220: Philosophy of the Human Person
Pl 260: Logic I
Pl 261: Logic II
Pl 300: Philosophy of Nature/Nature and Cosmos
Pl 303: Philosophy of Natural Science
Pl 332: Engineering Ethics
Pl 333: Science and Pseudo-Science
Pl 336: Philosophical Impact of Scientific Revolutions
Pl 345: General Ethics
Pl 353: Ethical Issues in Science and Technology
Pl 360: 20th-Century Philosophy - Analytic Tradition
Pl 371: Philosophy and Technology
Pl 391: Aristotle
Introduction to the Philosophy of Science
Pl 436: Science With a Human Face (French in France); X ISC 480
Pl 480: Origins
Pl 497: Metalogic/Philosophy of Logic
Philosophy of Mathematics
Contemporary Analytic Philosophy

Courses - Honors Program

HU 131: Humanities Science I
HU 132: Humanities Science I
HU 231: Humanities Science II
HONR 231: Humanities Science II

Courses - General Science Program

ISC 392: Science and Pseudo-Science

ISC 404: Current Issues in Cosmology
ISC 421: Science, Technology and Human Values

Course - Matteo Ricci College
HUM 400: Science and Technology: The Human Response; X ISC 393

Course - Department of History
HS 394: Modern Science and Western Civilization; X ISC 394

Yale University
Lecturer, Philosophy, 1976 to 1978
Teaching Assistant, Philosophy, 1974-1976

Courses
Pl 22: Logic
Pl 37: Philosophy of Science
Pl 39: Modern Philosophy
Pl 44: The Scientific Revolution
Pl 47: Analytic Philosophy

Yale College Seminar, Spring 1977: "Planck, Einstein, and the Philosophy of Science"

U.S. Navy
Instructor, School Training Command, San Diego, 1970 to 1971

Courses
Navigation and Coastal Piloting
Radar Assisted Piloting

PUBLICATIONS (*with Reed Guy, SU Physics Department; **with David Thorsell, SU Chemistry Department; ***with Richard McClellan, Gonzaga University Philosophy Department; ****with Daniel Dombrowski, SU Philosophy Department; *****with Matthias Neuber, Humboldt Universität zu Berlin; ******with Anastasios Brenner, L'Université de Montpelier; *******Aaron Stricker, SU Philosophy Department.

A. Books

The Energetics Controversy: Helm, Ostwald, and their Critics. Texts and Commentary (Kluwer Academic Publishers: Dordrecht, The Netherlands, 1997). Translations of original essays and critical reviews by R.J. Deltete.

The Historical Development of Energetics by Georg Helm, translated with an

introduction by R.J. Deltete, *Boston Studies in the Philosophy of Science* (Kluwer Academic Publishers: Dordrecht, The Netherlands, 1999).

A Brief Liberal Catholic Defense of Abortion (University of Illinois Press: Champagne-Urbana, IL, 2000).****

Ludwig Boltzmann: *Defending the Mechanical World-View* (Cambridge: Cambridge University Press, 2004).

Martin J. Klein, *Josiah Willard Gibbs*: *American Scientist*, ed. with a Forward and Introduction by Robert J. Deltete (University of Chicago Press, 2010).

B. Articles in Journals

"Late Nineteenth Century Physics: Realism, Phenomenalism, and the Mechanical World View," *Isis* 79 (1988), 182-205.

"Hertz, Boltzmann, and the *Bild* Conception of Physical Theory," *History of Science* 28 (1989), 380-398.

"Einstein's opposition to the quantum theory," *American Journal of Physics* 58 (1990), 673-683.*

"Fine, Einstein and Ensembles," *Foundations of Physics* 20 (1990), 943-965.*

"Einstein and EPR," *Philosophy of Science* 58 (1991), 377-397.*

"Planck, Ostwald, and the Second Law of Thermodynamics," *Isis* 82 (1991), 639-661.

"The Ontological Significance of Bell's Theorem," *British Journal for the Philosophy if Science* 54 (1992), 34-65.

"Bell's Theorem and Individuality: A Comment on French," *Philosophical Studies* 67 (1992), 169-177.

"What Does the Anthropic Principle Explain?" *Perspectives on Science* 1:2 (Summer, 1993), 285-305.

"Hawking on God and Creation," *Zygon: Journal of Religion and Science* 28:4 (September, 1993), 485-506.

"'Gegen die neuere Energetik': Max Planck's Critique of Energetics," *Historical Studies in the Physical Sciences* 25 (1994), 137-165.

"'Energie und ihre Wandlungen': Wilhelm Ostwald's Route to Energetics," *Centaurus* 37 (1994), 214-252.

"The Theoretical Styles of Bohr and Einstein," *Historical Studies in the Physical Sciences* 21 (1994), 194-216.

"Much Ado About Nothing: A Critigue of Quantum Cosmogenesis," *Perspectives on Science* 3:3 (Fall, 1995), 332-366.*

"Hawking on God and Physical Theory," *Zygon: Journal of Religion and Science* 30:4 (December, 1995), 635-643. Reprinted in *Science and Christian Belief* 15 (1998), 23-29.

"'Alte Einstein': Senility as an Explanation of Einstein's Opposition to Quantum Theory", *History of Science* 32 (1995), 261-278.

"Gibbs and Ostwald: A Contrast in Scientific Style," *Journal of Chemical Education* 73:4 (1996), 289-295.**

"Real Time, Imaginary Time and Quantum Cosmology: Comments on a Paper by Quentin Smith," *Proceedings of the Philosophy of Time Society* 2(2) (June, 1996), 14-33.

"'Studien zur Energetik': Wilhelm Ostwald's Energetic Theory," *Centaurus* 39 (1996), 156-178.

"Emerging from Imaginary Time," *Synthèse* 108 (1996), 185-203.*

"Hartle-Hawking Cosmology and Unconditional Probabilities," *Analysis* 57 (1997), 304-315.*

"A Fine Tuning Design Argument," *Faith and Philosophy* 30 (1997), 55-78.

"Simplicity and Why the Universe Exists," *Philosophy* 73 (1998), 490-494.

"Bohr, Einstein, and Separability," *Studies in the History and Philosophy of Science* 33 (1998), 221-248.

"Creation, Co-operation, and Causality," *Zygon: Journal of Religion and Science* 34:1 (March, 1999), 101-109.***

"Energetics at the Lübeck Naturforscherversammlung," *Synthèse* 119 (1999), 45-68.

"'Ein Wort der Mathematik an die Energetik': Boltzmann on Wilhelm Ostwald's Energetics," *Archive for the History of the Exact Sciences* 34 (1999), 123-151.

“Divine Causation,” *Faith and Philosophy* 33 (2000), 3-25.***

“Is the Universe Self-Caused?” *Philosophy* 75 (2000), 599-603.

“On Getting Something From Nothing,” *Perspectives on Science* 5 (2000): 38-62.

“Interpreting Einstein-Minkowski ‘Spacetime’,” *Journal of Philosophy* 87 (2001), 33-54.

“Are Quantum Events Plausible Loci for Divine Action?,” *Zygon: Journal for Religion and Science* 36:2 (June, 2001), 1-21.

“‘Gegen die neuere Energetik’: Max Planck’s Critique of Energetics,” *ISIS* 93 (2002), 58-83.

“Planck’s Dilemma: To Quantize or not to Quantize and the Difference it Makes,” *Studies in the History and Philosophy* 38 (2003), 48-75.

“Duhem on Natural Classification: A Critical Appreciation,”*Studies in the History and Philosophy of Science* 44 (2004), 32-78.

Essay review of Pierre Duhem, *Mixture and Chemical Combination and Other Essays*, trans. and ed. by Paul Needham (Dordrecht: Kluwer Academic Publishers). In *Foundations of Chemistry* 6 (2004), 203-232.******

“Stephen Hawking’s ‘Theology’,” *Theology and Science* 2:1 (2004), 21-39.

“*Die Lehre von der Energie*: Georg Helm’s Energetic Manifesto,” *Centaurus* 47 (2005), 140-162.

“Wilhelm Ostwald (1853-1932),” *HYLE*: *International Journal for the Philosophy of Chemistry* 12 (2006), 141-148.

“Nothing to It: Quantum Creation of the Universe from Nothing,” *Synthèse* 126 (2006), 146-165.

“Wilhelm Ostwald’s Energetics 1: Origins and Motivations, *Foundations of Chemistry* 9 (2007), 3-56.

“Ludwig Boltzmann’s Mathematical Argument for Atomism,” *Studies in History and Philosophy of Modern Physics* 38 (2007), 25-48.

“Wilhelm Ostwald’s Energetics 2: Energetic Theory, Part I,” *Foundations of Chemistry* 9 (2007), 265-316.

"Wilhelm Ostwald's Energetics 3: Energetic Theory, Part II," in *Foundations of Chemistry 10* (2008), 187-221.

"Man of Science, Man of Faith: Pierre Duhem's 'Physique de Croyant'," *Zygon*: *Journal of Religion and Science* 43 (2008), 627-637.

"Georg Helm's Chemical Energetics," in *Historical Studies in the Physical Sciences* 39, Part 2 (2009), 146-171.

"Pierre Duhem's *L'Évolution de la méchanique*", *The American Journal of Physics* 79 (2009), 247-255.

"Homme de Science, Homme de Foi," Duhem on Science and Religion, *Metascience* 20 (March 2011), 18-25.

"Mechanical Explanation at the End of the Nineteenth Century," *British Journal for the Philosophy of Science* (February 2011)

"Why the 'New Atheism' is Nothing New," *Theology and Science* 13 (2011), 124-137.

"Wilhelm Ostwald's Energetics 4: Criticism and Response. Forthcoming in *Foundations of Chemistry*.

"Ernan McMullin on Anthropic Reasoning in Cosmology." Forthcoming in *The American Catholic Philosophical Quarterly*.

B. Articles in Books

"Opposing the Mechanical World View: Why Energetics Matters," in *Challenges to the Mechanical World View*: *Essays in Honor of Russell McCormmach*, P. Heiman ed (Chicago, IL: U. of Chicago Press, 1993), 114-138.

"Gibbs and the Energeticists," in *No Truth Except in the Details: Essays in Honor of Martin J. Klein*, A.J. Kox and D. Siegel eds. (Kluwer Academic Publishers: Dordrecht, The Netherlands, 1996), pp. 135-169.

"Obtenir quelque chose à partir de rien," in *Le Vide: Univers du Tout et de Rien*, E. Gunzig and S. Diner eds. (Revue de l'Université de Bruxelles, 1998). pp. 411-422.*

"Helm's History of Energetics: An Introduction," in *The Historical Development of Energetics*, translated with an introduction by R.J. Deltete (Kluwer Academic Publishers:

Dordrecht, The Netherlands, 1999).

"Gibbs, Josiah Willard," in *The MacMillan Encyclopedia of Energy* (New York, NY, 2000), 579-581.

"Ostwald, Wilhelm Fredrich," in *The Dictionary of Scientific Biography*, 2nd ed. (New York: Scribner's, 2001), Vol. 8, 73-79.

"Uneasy Allies: Mach and the Energeticists," in *Mach in Prague*, John Blackmore ed. (Dordrecht, The Netherlands: Kluwer, 2002), Vol. 1, 185-216*****

"Planck's Debt to Boltzmann," in *History of Philosophy of Science: New Trends and Perspectives*, Michael Heidelberger and Fredrich Stadler eds (Dordrecht: Kluwer: Vienna Circle Yearbook 9, 2002), 189-201.

"Energetics," in *The Oxford Companion to the History of Modern Science*, J.L. Heilbron ed. (New York: OUP, 2003), 82-84.

"Another of Mach's Uneasy Allies: Notes on Gustav Jaumann," in *Mach in Prague*, John Blackmore ed. (Dordrecht, The Netherlands: Kluwer, 2003), Vol. 3, 142-164.*****

"Helm on Mach," *Proceedings of the Fourth Bi-Annual HOPOS Meeting* in Montréal 14-16 June 2002 (University of Montréal Press, 2003), 54-66.

"Homme de Science, Homme de Foi: Pierre Duhem's 'Physique de Croyant'," *Proceedings of the Fifth Bi-Annual HOPOS Meeting* in San Francisco 24-27 June 2004 (University of California Press, 2005), 122-134.

"Gustav Jaumann's Work: A Summary," in *Ernst Mach's Science*: *Its Character and Influence on Einstein and Others*, John T. Blackmore, Ryoichi Itagaki, and Setsuko Tanaka eds (Tokai University Press, 2006), 267-285.

"Georg Helm's Chemical Energetics," *Selected Profeedings of the Sixth Bi-Annual HOPOS* meeting in Paris 14-18 June 2006 (Paris: puf, 2008), 198-211.

"Duhem, Pierre-Maurice-Marie," in *The New Dictionary of Scientific Biography*, Noretta Koertge Ed. in Chief (New York: Charles Scribner's, 2008), vol. 2, 319-323.

"Ostwald, Friedrich Wilhelm," in *The New Dictionary of Scientific Biography*, Noretta Koertge Ed. in Chief (New York: Charles Scribner's, 2008), vol. 5, 356-359.

"Ernst Mach & Georg Helm," in *Ernst Mach's Influence*, John T. Blackmore, Ryoichi Itagaki, and Setsuko Tanaka, eds. (Enfield, N. H.: Sentinel Open Press, 2009), 369-381,

"Ernst Mach & Wilhelm Ostwald," in *Ernst Mach's Influence*, John T. Blackmore, Ryoichi Itagaki, and Setsuko Tanaka, eds. (Enfield, N. H.: Sentinel Open Press, 2009), 381-389.
"Ernst Mach & Pierre Duhem," in *Ernst Mach's Influence*, John T. Blackmore, Ryoichi Itagaki, and Setsuko Tanaka, eds. (Enfield, N. H.: Sentinel Open Press, 2009), 389-402.

"Mach's Elementenlehre," in *Ernst Mach's Influence*, John T. Blackmore, Ryoichi Itagaki, and Setsuko Tanaka, eds. (Enfield, N. H.: Sentinel Open Press, 2009), 402-415.

"Thermodynamics in Wilhelm Ostwald's Physical Chemistry," *Philosophy of Science* 77 (2010), 888-899.

"Ostwald, Friedrich Wilhelm," in *Elsevier Handbook of the Philosophy of Chemistry*, Robin Findlay Hendry, Paul Needham, and Andrea Woody, eds (forthcoming 2010).

"Gibbs, Josiah Willard," *Elsevier Handbook of the Philosophy of Chemistry*, Robin Findlay Hendry, Paul Needham, and Andrea Woody, eds (forthcoming 2010).

"Entropy in Chemistry," *Elsevier Handbook of the Philosophy of Chemistry*, Robin Findlay Hendry, Paul Needham, and Andrea Woody, eds (forthcoming 2010).

C. Notes

Note on "Bell's Theorem and the foundations of quantum physics" [*Amer. J. of Phys.* 53 (1985)], *American Journal of Physics* 56 (1988), 565-567.*

D. Essay Reviews

Stephen Hawking, *Black Holes and Baby Universes and Other Essays* (New York: Bantum, 1993). In *Zygon: Journal of Religion and Science* 30:4 (December, 1995), 635-642.

Susan Quinn, *Marie Curie: A Life* (New York: Simon & Schuster, 1995). In *History of Science* 34 (1996), 241-248.

Stanley J. Jaki, *Pierre Duhem: Scientist and Catholic* [English version of *Pierre Duhem: Homme de foi et de science*] (Front Royal, VA: Christendom Press, 1991). In *Christianity Today* (August 12, 1996), 42-45.

Willem B. Drees, *Religion, Science, and Naturalism* (Cambridge: Cambridge University Press, 1996). In the *American Catholic Philosophical Quarterly* 72 (1998), 459-465.

Max Jammer, *Einstein and Religion: Physics and Theology* (Princeton, NJ: Princeton U. Press, 1999). In the *CTNS Bulletin* 19:4 (Fall, 1999), 22-24.

Paul Brockelman, *Cosmology and Creation: The Spiritual Significance of Contemporary Cosmology* (Oxford: OUP, 1999). In *Philosophia Christi* 4:1 (2002): 257-262.
Nicholas Saunders, *Divine Action in the World* (Oxford: OUP, 2002). In *Zygon:Journal for Religion and Science* 39:3 (2004), 247-252.

John Haught, *Deeper than Darwin* (Boulder, CO: Westview, 2003). In *The American Catholic Philosophical Quarterly* 79 (2005), 507-511.

Rodney Stark, *The Victory of Reason*: *How Christianity Led to Freedom, Capitalism, and Western Success* (New York: Random House, 2005). In *Zygon*: *Journal of Religion and Science* 41: 3 (2006), 215-221.

Richard Dawkins, *The God Delusion* (New York: Houghton Mifflin, 2006). In *Zygon*: *Journal of Religion and Science* 42: (2007), 146-152.

Michio Kaku, *Einstein's Cosmos*: *How Albert Einstein's Vision Transformed our Understanding of Space and Time* (New York & London: W. W. Norton, 2005). In *American Scientist* 98 (2008), 163-167.

"Werner Heisenberg and Post-War Germany." Review of Cathryn Carson, *Heisenberg in the Atomic Age*: *Science and the Public Sphere* (Cambridge U. Press 2010). In *Annals of Science* 68 (2011), 155-159.

"How Relativity Got Accepted and How Einstein Came to be Regarded as its Author." Essay review of Richard Staley, *Einstein's Generation*: *The Origins of the Relativity Revolution* (Chicago: U. of Chicago Press, 2008). In *Annals of Science* 68(2) (2011), 261-265.

"Einstein's Quest for Unity." Review of Jeroen van Dongen, *Einstein's Unification* (Cambridge U. Press 2010). In *Annals of Science* (Online publication 7 February 2011)

E. Reviews

Peter Kosso, *Reading the Book of Nature* (Cambridge: Cambridge University Press, 1992). In *Teaching Philosophy* 17 (1994), 188-191.

James Rachels, *The Elements of Moral Philosophy*, 2nd ed. (New York: McGraw-Hill, Inc., 1993). In *Teaching Philosophy* 16 (1993), 270-273.

Lawrence Sklar, *Philosophy of Physics* (Boulder and San Francisco: Westview Press, 1992). In *Isis* 85 (1994), 363-364.

William Lane Craig and Quentin Smith, *Theism, Atheism, and Big-Bang Cosmology* (Oxford: Clarendon Press, 1993). In *Zygon: Journal of Religion and Science* 30 (1995), 653-656.

Peter Kosso, *Reading the Book of Nature* (Cambridge: Cambridge University Press, 1992). In *Philosophy of Science* 63 (1996), 475-476.

Regine Zott, *Fritz Haber in seiner Korrespondenz mit Wilhelm Ostwald sowie in Briefen an Svante Arrhenius* (Berliner Beiträge zur Geschichte der Naturwissenschaften und der Technik). In *ISIS* 89:3 (1998), 562-563.

Mark William Worthing, *God, Creation, and Contemporary Physics* (Minneapolis, MN: Fortress Press, 1996). In the *American Catholic Philosophical Quarterly* 73 (1999), 71-75.

Gregory N. Derry, *What Science Is and How It Works* (Princeton, NJ: Princeton U. Press, 2000). In *The Quarterly Review of Biology* 76:2 (2001), 222-223.

Robert M. Wald, *Space, Time, and Gravity*: *The Theory of the Big Bang and Black Holes*, 3rd ed. (Chicago and London: U of Chicago Press, 2000). In *ISIS* 93 (2002), 421-423.

Scientific Literacy for the Twenty-First Century, ed. by Stephanie Pace Marshall, Judith A. Scheppler & Michael J. Parmisno (Amherst, NY: Prometheus Books, 2003). In *The Quarterly Review of Biology* 78:3 (2003): 352-353.

Anastasios Brenner, *Duhem: Science, réalité et apparence: La relation entre philosophie et histoire dans l'oeuvre de Pierre Duhem* (Paris: Libraire Philosophique J. Vrin, 1997). 2nd ed. In *ISIS* 94:3 (2003): 549-550.

Pierre Duhem, *The Evolution of Mechanics*. Translated by Michael Cole. 2nd ed. (Alphen aan den Rijn, The Netherlands: Sijthoff & Noordhoff, 1998). In *History of Science* 42 (2003): 176-180.

Merrilee H. Salmon, *et. al*., *Introduction to the Philosophy of Science: A Text by Members of the Department of the History and Philosophy of Science of the University of Pittsburgh*, 2nd ed. (Englewood Cliffs, N.J.: Prentice Hall, 1999). In *Philosophy of Science* 70:4 (2003): 849-851.

Anastasios Brenner, *Les origines françaises de la philosophie des sciences* (Paris: puf, 2003). In *Philosophy of Science* 71 (2004), 330-334.

James Gleick, *Isaac Newton* (New York: Pantheon, 2003), in *ISIS* 95 (2005), 702-703.

Stephen M. Barr, *Modern Physics and Ancient Faith* (Notre Dame, Ind.: University of Notre Dame Press, 2003). In *ISIS* 96:2 (2005), 296-297.

Philip Clayton and Jeffrey Schloss, eds. *Evolution and Ethics: Human Morality in Biological and Religious Perspective* (Grand Rapids, MI: William B. Eerdmans Publishing Co., 2004). In *Philosophy in Review* XXV (2005), 330-334.

George Basalla, *Civilized Life in the Universe*: *Scientists on Intelligent Extraterrestrials* (Oxford: Oxford University Press, 2005). In *Science* 311 (2006), 1244-1245.

Steve Fuller, *Kuhn vs. Popper*: *The Struggle for the Soul of Science* (New York: Columbia University Press, 2004). In *Philosophy in Review* XXVI (2006), 183-185.

Phil Dowe, *Galileo, Darwin, and Hawking*: *The Interplay of Science, Reason, and Religion*, In *Philosophy of Science* 73 (2006), 168-170.

Leonard Susskind, *The Cosmic Landscape*: *String Theory and the Illusion of Intelligent Design* (New York: Little, Brown & Company, 2005). In *Theology and Science* 8 (2006), 134-136.

John F. Haught, *Is Nature Enough? Meaning and Truth in the Age of Science* (Cambridge: Cambridge University Press, 2006). In *Philosophy in Review* XXVII (2007), 126-127.

Peter Dear, *The Intelligibility of Nature*: *How Science Makes Sense of the World* (Chicago: University of Chicago Press, 2006). In *The Quarterly Review of Biology* 82 (2007), 141-142.

Carlos Garcia, *Popper's Theory of Science*: *An Apologia* (London: Continuum, 2006). In *Philosophy in Review* XXVII (2007), 172-174.

P. M. Harman, *Energy, Force, and Matter*: *The Conceptual Development of Nineteenth-Century Physics* (Cambridge: Cambridge University Press, 2003). In *Nature* 86 (2008), 62-64.

Christopher Hitchens, *God is not Great*: *How Religion Poisons Everything*. In *Christianity Today* 23 (2008), 101-103.

Marcus Hellyer, *Catholic Physics*: *Jesuit Natural Philosophy in Early Modern Germany*. Notre Dame, ID: Notre Dame University Press, 2005. In *Annals of Science* 64 (2007), 607-609. (Not published until February 2008)

C. Stephen Layman, *Letters to Doubting Thomas*: *A Case for the Existence of God* (New York: Oxford University Press, 2007). In *Philosophy in Review* XXVIII: 1 (2008),

41-43.

Natalie Angier, *The Canon*: *A Whirligig Tour of the Beautiful Basics of Science* (New York: Houghton Mifflin, 2007). In *Quarterly Review of Biology* 83 (June 2008), 197-198.

John H. Sceski, *Popper, Objectivity and the Growth of Knowledge* (London: Continuum, 2007). In *Philosophy in Review* XXVIII: 6 (2008), 47-50..

Dieter Hoffman, *Max Planck*: *Die Entstehung der modernen Physik* (München: C.H. Beck, 2008). In *Annals of Science* 65:4 (2008), 594-597.
Nancy Thorndike Greenspan, *The End of the Certain World*: *The Life and Science of Max Born*. *The Nobel Physicist who ignited the Quantum Revolution* (New York: Wiley & Sons, Inc., 2005). In *Annals of Science* 66:3 (2009), 433-436.

James Rachels, *The Legacy of Socrates*: *Essays in Moral Philosophy*, ed. by Stuart Rachels. (New York: Columbia University Press, 2007). In *Philosophy in Review* XXIX: 2 (2009), 132-134.

Steve Fuller, *Science vs. Religion? Intelligent Design and the Problem of Evolution* (Cambridge: Polity Press, 2007). In *American Theological Inquiry* 1:2 (2008), 162-164. Rpt in *Philosophy in Review* XXIX:3 (2009), 183-186.

James W. Felt, *Aims*: *A Brief Metaphysics for Today* (Notre Dame, ID: U of Notre Dame Press, 2007). In *Essays in Philosophy* 10:1 (January 2009), 124-128.

Donal O'Shea, *The Poincaré Conjecture*: *In Search of the Shape of the Universe* (New York: Walker & Company, 2007). In *Annals of Science* 66:1 (2009), 141-143.

Robert Nola & Howard Sankey, *Theories of Scientific Method* (Montreal & Kingston: McGill-Queen's University Press, 2007). In *Philosophy in Review* XXIX: 1 (2009), 55-57.

Nicola Mößner, Sebastian Schmoranzer, Christian Weidemann, eds. *Richard Swinburne*: *Christian Philosophy in the Modern World*. Frankfurt: Ontos Verlag 2008. In *Philosophy in Review* XXIX:4 (2009), 44-46.

John B. Cobb Jr., ed. *Back to Darwin*: *A Richer Account of Evolution* (Grand Rapids, MI: William B. Erdmans Publishing Company, 2008). In *Theology and Science* 4:2 (2009), 89-91.

Martin Carrier, Don Howard, and Janet Kouany, eds. *The Challenge of the Social and the Pressure of Practice*: *Science and Values Revisited* (Pittsburgh U. Press, 2008). In *Philosophy of Science* 78 (2009), 101-104.

Lorraine Daston and Peter Galison, *Objectivity* (New York: Zone Books, 2007). In *Philosophy of Science* 76 (2009), 234-236.

James V. Shall, *The Mind that is Catholic*: *Philosophical and Political Essays* (New York: Catholic University of America Press, 2008). In *Philosophy in Review* XXIX:6 (2009), 56-57.

Yuval Ginbar, *Why Not Torture Terroists? Moral, practical and Legal Aspects of the 'Ticking Bomb' Justification for Torture* (New York: Oxford University Press, 2008). In *Christian Ethics* 18 (2009), 251-253.

John Haught, *God and the New Atheists*: *A Critical Response to Dawkins, Harris, and Hitchens* (Louisville & London: Westminster John Knox Press, 2008). In *American Theological Inquiry* 3.1 (2010), 184-186.

John Forge, *The Responsible Scientist*: *A Philosophical Inquiry* (Pittsburgh: University of Pittsburgh Press, 2008). In *Philosophy of Science* 77.1 (2010), 143-146.

Helge Kragh, *Entropic Creation*: *Religious Contexts of Thermodynamics and Cosmology* (Hampshire, UK: Ashgate, 2008). In *Zygon*: *Journal of Religion and Science* 45 (2010), 281-282.

Paul K. Moser, ed., *Jesus and Philosophy* (Cambridge: Cambridge U. Press, 2009). In *Philosophy in Review* 30 (2010), 53-55.

Robert Wright, *The Evolution of God* (New York: Little, Brown and Company, 2009). In *Zygon*: *Journal of Science and Religion* 45 (2010), 530-531.

Graham Farmelo, *The Strangest Man*: *The Hidden Life of Paul Dirac, Quantum Genius* (London: Farber & Farber, 2009). In *American Scientist* 86 (2010), 122-124.

Jeffrey A. Schaler, ed., *Peter Singer Under Fire*: *The Moral Iconoclast Faces his Critics* (Chicago: Open Court, 2009). In *Philosophy in Review* 30.5 (2010), 372-375.

John F. Haught, *Making Sense of Evolution*: *Darwin, God, and the Drama of Life* (Louisville, KY: Westminster John Know Press, 2010). In *ZYGON*: *Journal of Religion and Science* 45 (2010), 777-779

David L. Perry, *Partly Cloudy*: *Ethics in War, Espionage, Covert Action, and Interrogation* (Lanham, MD: The Scarecrow Press, Inc, 2009). In *Philosophy in Review* 31 (2011), 42-44.

Alan Sokel, *Beyond the Hoax*: *Science, Philosophy and Culture* (New York: Oxford

University Press, 2008). In *Philosophy in Review* 31 (2011), 128-131.

Fulvio Melia, *Cracking the Einstein Code*: *Relativity and the Birth of Black Hole Physics* (Chicago: U. of Chicago Press, 2009). In *Annals of Science* 68:2 (2011), 101-104.

Cathryn Carson, *Heisenberg in the Atomic Age*: *Science and the Public Sphere* (Cambridge University Press, 2009). In *Annals of Science* 68:1 (2011), 82-86.

Louis Caruana, S.J. (Ed), *Darwin and Catholicism*: *The Past and Present of a Cultural Encounter* (T&T Clark, 2009). In *Philosophy in Review* 31 (2011), 145-147.

Charles Taliaferro and Chad Meister (eds.), *The Cambridge Companion to Christian Philosophical Theology* (New York: Cambridge University Press, 2010). In *Philosophy in Review* XXXI (2011), 74-77.

Jan Naveson, *This is Ethical Theory* (Chicago: Open Court, 2010). In *Philosophy in Review* XXXI (2011), 130-134.

Jan Narveson and James P. Sterba, *Are Liberty and Equality Compatible?* (New York: Cambridge University Press 2010). In *ZYGON: Journal of Religion and Science* 46 (2) (2011), 98-100.

Stephen R. L. Clark, *Understanding Faith*: *Religious Belief and its Place in Society* (Imprint Academic, 2009). In *Christianity Today* (forthcoming).

Stephen Hawking and Leonard Mlodinov, *The Grand Design* (New York: Bantam, 2010). In *Zygon*: *Journal of Religion and Science* (forthcoming).

Paul Feyerabend, *The Tyranny of Science*. Ed. with Introduction by Eric Oberheim. In *Philosophy in Review* XXXI (2011), 271-273.

F. Translations

Albert Einstein, "Elementare Uberlegungen zur Interpretation der Grundlagen der Quanten-Mechanik," in *Scientific Papers Presented to Max Born* (Edinburgh: Oliver & Boyd, 1953), as "Elementary Reflections on Interpreting the Foundations of Quantum Mechanics."* In *Nature* 356 (2 April 1992), 393-395.

Albert Einstein, "Einleitende Bemerkungen über Grundbegriffe," in *Louie de Broglie: Physicien et penseur*, A. George ed. (Paris: Éditions Albin Michel, 1953), as "Introductory Remarks on the Fundamental Concepts of the Quantum Theory."* In the *American Journal of Physics* 61 (October, 1993), 949-952.

The Energetics Controversy: Helm, Ostwald, and Their Critics. Texts and Commentary

(Kluwer Academic Publishers: Dordrecht, The Netherlands, 1997). Translations by R.J. Deltete.

Georg Helm, *Die Energetik nach ihrer geschichtlichen Entwicklung* (Leipzig: Veit & Comp, 1898), as *The Historical Development of Energetics*, *Boston Studies in the Philosophy of Science* (Kluwer Academic Publishers: Dordrecht, The Netherlands, 1999).

Georg Helm, "Ernst Mach, dem naturwissenschaftlichen Denker, zum Gedächtniss," *Sitzungberichte der naturwissenschaftlichen Gesellschaft ISIS zu Dresden* (1916, 45-54). In *Mach in Prague*, John Blackmore, ed. (Kluwer Academic Publishers: Dordrecht, The Netherlands, 2001), Vol. 1, pp. 62-70.*****

G. Under Review

H. Works in Progress

"Einstein's Realism"

MAJOR PRESENTATIONS

"Hertz, Boltzmann, and the *Bild* Conception of Physical Theory," Philosophy of Science Association (PSA) meeting, Pittsburgh, PA, Oct. 24, 1986.

"Einstein's Realism", PSA meeting, Evanston, IL, Oct. 29, 1988.

"`Alte Einstein': Senility as an Explanation of Einstein's Opposition to Quantum Theory", History of Science Society (HSS) meeting, Seattle, WA, Oct. 26, 1990.

"What Does the Anthropic Principle Explain?", PSA meeting, Chicago, IL, Oct. 30, 1992.

"`Studien zur Energetik': Wilhelm Ostwald's Energetic Theory", HSS meeting, Washington, DC, Dec. 29, 1992.

"`Gegen die neuere Energetik': Max Planck's Critique of Energetics", HSS meeting, Santa Fe, NM, Nov. 13, 1993.

"The Ontological Implications of Bell's Theorem", PSA meeting, New Orleans, LA, Oct. 14, 1994.

"`Ein Wort der Mathematik an die Energetik': Boltzmann on Wilhelm Ostwald's Energetics", HSS meeting, New Orleans, LA, Oct. 15, 1994.

"Real Time, Imaginary Time, and Quantum Cosmology", American Philosophical Asociation (APA) Central Division meeting, Chicago, IL, Dec. 29, 1995.

"Much Ado About Nothing: A Critique of Quantum Cosmogenesis", PSA meeting, Cleveland, OH, Nov. 2, 1996.

"Pierre Duhem: Historian of Medieval Science", HSS meeting, San Diego, CA, Nov. 8, 1997.

"Boldness and Caution in the Theoretical Styles of Bohn and Einstein", PSA meeting, Kansas City, MO, Oct. 23, 1998.

"Helm and Boltzmann: Energetics at the Lübeck Naturforscherversammlung", HSS meeting, Pittsburgh, PA, Nov. 6, 1999.

"Gibbs and Ostwald: A Contrast in Scientific Style," Yale University celebration honoring Martin J. Klein, April 17, 2000.

"Stephen Hawking's `Theology'," Center for Theology and Natural Science (CTNS), Berkeley, CA, June 8, 2000.

"Mach and Boltzmann", International Boltzmann Conference, Vienna, Austria, July 6, 2000.

"Planck and Boltzmann", The Quantum Centennial, Humboldt Universität zu Berlin, August 17, 2001

"Helm on Mach", L'Université de Montréal, 13 June 2002.

"Homme de Science, Homme de Foi: Pierre Duhem's 'Physique de Croyant'," University of San Francisco, 25 June 2004.

"Pierre Duhem et sa *Theorie Physique*," Université de Paris X, 20 June 2005.

"Ludwig Boltzmann zum Gedächtniss," Universität Wien, 25 June 2005.

"Georg Helm's Chemical Energetics, École normale supèrieure, 17 June 2006.

"Duhem and Natural Classification," Humboldt Universität zu Berlin, 20 June 2006.

"Stephen Hawking's 'Theology',"CTNS, Berkeley, CA, December 22, 2006.

"Thermodynamics in Wilhelm's Ostwald's Physical Chemistry," PSA, Pittsburgh, 18 November 2008.

"Josiah Willard Gibbs: American Scientist," HSS, Pittsburgh, 19 November 2008.

"Defending the Mechanical World View: Ludvig Boltzmann's Philosophy of Science," Universität Wien, 11 July 2009.

" Pierre Duhem's L'Évolution de la méhanique," Sorbonne, 15 July 2009.

" Entropy in Chemistry," Philosophy of Chemistry Association, Madrid, 19 June 2010.

"'Gegen die neuere Energetik': Planck's Critique of Energetics," Max Planck Gesellschaft, Berlin, 26 June 2010.

HONORS AND AWARDS

2005-2006	Axer Endowed Chair, Seattle University
2002, 2003	NSF Scholar (Division of History and Philosophy of Science)
2001, 2005	A&S Faculty Research Fellowship, Seattle University
2000	A&S Scholarship Excellence Award (1995-1999), Seattle University
1998	Templeton Foundation Speakers Award
1997	Templeton Foundation Course Award (with Fr. Bob Spitzer)
1996	ASA Award for Exemplary Essays in Religion and Science, for "Hawking on God and Physical Theory," *Zygon: Journal of Religion and Science* 30 (1995), 635-643.
1990	NEH Travel to Collections Grant (Germany and Austria)
1987, 1989, 2000	Summer Faculty Fellowships, Seattle University
1984	Porter Prize, Yale University (for dissertation)
1977 - 1978	Ezra Stiles Fellowship, Yale University
1977 - 1978	Yale University Graduate Fellowship
1973 - 1977	National Science Foundation and Woodrow Wilson Fellowships, Yale University
1976 - 1978	R.E. Bates Fellow, Jonathan Edwards College, Yale University
1974, 1976	DAAD fellowships (Germany)
1969	Awarded NSF and WW Fellowships; Rhodes and Marshall finalist; Gene Fabre Memorial Award (Alpha Sigma Nu, Seattle University)

PROFESSIONAL MEMBERSHIPS

American Philosophical Association (APA)
Philosophy of Science Association (PSA)
History of Science Society (HSS)

Institute on Religion in an Age of Science (IRAS)
West Coast History of Science Society (WCHSS)
Columbia Group (NW HSS Society)
Society for Sensible Scientific Explanations (WA chapter of CSICOP)

SERVICE

Professional

PSA Graduate Student Committee, 1988 (Evanston, IL)
PSA Program Committee, 1990 (Minneapolis, MN)
PSA Planning Committee, 1994; Program Committee of the History of Philosophy of Science (HOPOS) Section (New Orleans, LA)
HSS Local Arrangements Committee, 1990 (Seattle, WA)
HSS Program Committee, 1996 (Atlanta, GA)
WCHSS Executive Committee, 1994-1996; Program Committee, 1995 (Los Angeles, CA)
Reviewer of applications for Templeton Foundation Book Awards (Philadelphia, 1998)
Organizer of "Evolution as a Christian Theme" (Templeton Conference at SU, 1998)
HSS Program Committee, 2002, (Austin, TX)
NSF proposal reviewer, 2001, 2002, 2005
HOPOS Program Committee, 2004 (San Francisco, CA)
Co-director (with Paul Kidder) of the NW Conference for Philosophy , SU 2005
HOPOS Program Committee, 2006 (Paris, France)
HOPOS Executive Committee, 2005-2009
Reviewer of manuscripts for various presses and journals

University

Faculty Senate, 1986-1989, 1993-1994, 1997-1999; VP, 1997-1999; Interim President, 1999.
Sullivan Award Committee, 1997-1999
Outdoor Experience Committee, 1987-1989
Commencement Speaker Committee, 1989-1991
Electrical Engineering Department Program Review, 1991
Honorary Degree Committee, 1990-1991, 1996-1997, 2000-2001
Honorary Degree Committee for Walter Cardinal Kaspar, 2004
Science & Engineering Program Review, 1991
Academic Council, 1995-1997
Sociology Program Review, 1995
University Grievance Committee, 1995-1996, 1999
Masters of Software Engineering Program Review, 1997
Endowed Fund for Mission Related Projects, 2002-2005

University IRB, chair 2001-2004
University Conduct Review Board , 2004-2006
Summer Faculty Fellowship Committee, 2004-2007
Director of Catholic Studies, 2006-2008
Magis: Alumni Committed to Mission, Advisory Board Member, 2007-present
SU Alumni Board of Governors, 2009-present

Arts & Sciences

Core Review Committee, 1986-1988
Various Phase I Core Implementation Committees, 1986-1989; Chair, PL 110 Committee 1987-present
Freshman Orientation Committee, 1985-1989
Interdisciplinary Core Requirement Committee, 1986-1992
Core Diversity Committee, 1988-1991
Pre-Major Freshman Advisor, 1988-2000
School Grievance Committee, 1992-1994
College Relations Committee, 1997-1999, 2003-2006
Freshman Success Advisory Council, 1998-2001
Collegium Director (for new faculty), 2000-2004
Gaffney Chair Committee, 2005

REFERENCES

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