

## **CURRICULUM VITAE**

### **PERSONAL DETAILS**

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Date of birth : November 8, 1956.  
Place of birth : Rustington, Sussex, U.K.  
Nationality : British  
Marital status : Married (to a US citizen).

### **UNIVERSITY EDUCATION**

1985 : Ph.D., Philosophy of Science, University of London.  
Thesis : 'Identity and Individuality in Classical and  
Quantum Physics'.  
Supervisor : Prof. Michael Redhead.  
1978 : B.Sc. (Hons.), Physics, University of Newcastle - Upon -Tyne.

### **ACADEMIC EXPERIENCE**

May 2002-present Professor of Philosophy of Science, Dept. of Philosophy, University of  
Leeds.  
Aug. 2000 - May 2002: Reader, School of Philosophy, University of Leeds.  
Aug. 1995 - Aug. 2000: Senior Lecturer, School of Philosophy, University of Leeds.  
Aug. 1993 - Aug. 1995: Lecturer, Dept. of Philosophy, University of Leeds.  
1989 - 1993: Assistant Professor, Dept. of Philosophy and Religion,  
Southeast Missouri State University.  
Dec. 1988 - Aug. 1989: On leave of absence. Part-time teacher, Refugee Program, Houston  
Community College, Houston, Tx.  
Aug. 1985 - Dec. 1988: Assistant Professor, Dept. of Philosophy, State University of  
Campinas, Campinas, Sao Paulo, Brazil.

- 1981 - 1984: Part - Time Lecturer, Dept. of General Studies, City of London Polytechnic, London, U.K.
- 1981 - 1985: Part - Time Lecturer at various Colleges of Further Education, London.

## TEACHING

Undergraduate level:

Modules at all levels including 'How Science Works', 'Knowledge, Self and Reality', 'The Structure of Reality' and 'Philosophy of Modern Physics'.

Postgraduate level:

'Philosophy of Science: Classic Debates and Current Trends'; 'Advanced Topics in Realism and Representation in Science'; 'Advanced Topics in the Metaphysics of Science'.

## STUDENT SUPERVISION

2 Ph.D., 1 M.Sc., Dept. of Philosophy, State University of Campinas.

20+ Ph.D., 1 M.A. (Research), School of PRHS, University of Leeds.

## Ph.D. EXAMINATIONS

Bristol (2 PhD; 1 MLitt); Cambridge (3); Durham (3); Edinburgh (M.Phil); Hong Kong (1); Lausanne (1); Leeds (7); London (7); Oxford (1), Rome (1), UCL (1).

## PUBLICATIONS

### BOOKS

*Cutting the Chain of Correlations: Reviving a Phenomenological Approach to Quantum Mechanics* (submitted)

*There Are No Such Things as Theories*; OUP, 2020.

*The Aesthetics of Science: Beauty, Imagination and Understanding*, with M. Ivanova (eds.); Routledge, 2020.

*Scientific Realism and the Quantum*, with J. Saatsi (eds); OUP, 2020.

*Applying Mathematics: Immersion, Inference, Interpretation*, with O. Bueno; OUP, 2018.

*Thinking About Science, Reflecting on Art: Bringing Aesthetics and Philosophy of Science Together*, with O. Bueno, G. Darby and D. Rickles; Routledge, 2017.

*Philosophy of Science: Key Concepts*, Bloomsbury Academic, 2016 (2<sup>nd</sup> ed. of *Science: Key Concepts in Philosophy*, updated and with new ch. on explanation).

*The Structure of the World: Metaphysics and Representation*. Oxford: Oxford University Press, 2014 (pbk 2016).

*The Bloomsbury Companion to the Philosophy of Science*, with Juha Saatsi (eds.), Bloomsbury, 2014 (2<sup>nd</sup> ed.; 2011).

*Science: Key Concepts in Philosophy*, Continuum Press, 2007.

*The Structural Foundations of Quantum Gravity*, with D. Rickles and J. Saatsi (eds.), Oxford: Clarendon Press, 2006.

*Identity in Physics: A Historical, Philosophical and Formal Account*, with Décio Krause, Oxford: Oxford University Press, 2006.

*Science and Partial Truth: A Unitary Approach to Models and Reasoning in Science*, with Newton da Costa, Oxford University Press, 2003.

*Correspondence, Invariance and Heuristics: Essays in Honour of Heinz Post*, with Harmke Kamminga (eds.), Boston Studies in the Philosophy of Science, gen. ed. R.S. Cohen, Dordrecht, Reidel, 1993.

#### **PARTS OF BOOKS**

‘What is This Thing Called Structure?’, forthcoming in F.A. Muller (ed.), *The Structure of Reality, The Reality of Structure*, Springer, 202?

‘Metaphysical Underdetermination as a Motivational Device’, forthcoming in J.B. Arenhart, O. Bueno and D. Krause (eds.), *Individuals and Non-Individuals in Quantum Theory*, Springer, 2023.

‘Representation and Realism: On Being a Structuralist All the Way (Up and) Down’, forthcoming in M. Frauchliger (ed.), *Proceedings of the 2018 Lauener Symposium in Analytic Philosophy*.

‘Fundamentality’, in E. Knox and A. Wilson (eds.), *The Routledge Companion to the Philosophy of Physics*, Routledge, pp. 679-688, 2021.

‘Modality and Scientific Structuralism’, in O. Bueno and S. Shalkowski (eds.), *Routledge Handbook of Modality*, Routledge, pp. 221-229, 2020.

‘From a Lost History to a New Future: Is a Phenomenological Approach to Quantum Mechanics Viable?’, in H. Wilsche and P. Berghofer (eds.), *Phenomenological Approaches to Physics*, Springer, pp. 205-226, 2020.

‘Doing Away with Dispositions’, in A. Meinke (ed.), *Dispositionalism. Perspectives from Metaphysics and the Philosophy of Science*, Springer Synthese Library, Springer, pp. 189-212, 2020.

‘Performance and Practice: Situating the Aesthetic Qualities of Theories’, in S. French and M. Ivanova (eds.), *The Aesthetics of Science: Beauty, Imagination and Understanding*; Routledge pp. 186-210, 2020.

‘Structural Realism and the Standard Model’, in A. Cordero (ed.), *Philosophers Look at Quantum Mechanics*, International Ontology Congress, pp. 163-178, 2019.

‘There Are No Such Things as Ordinary Objects’ in J. Cumpa and B. Brewer (eds.), *The Nature of Ordinary Objects*, Cambridge University Press, pp. 260-273, 2019.

‘Symmetries and Explanatory Dependencies’, with Juha Saatsi, in J. Saatsi and A. Reutlinger (eds.), *Explanation Beyond Causation*, Oxford University Press, pp. 185-205, 2018.

‘Realism and Metaphysics’, in J. Saatsi (ed.), *Routledge Handbook of Realism*, Routledge, pp. 394-406, 2018.

‘Building Bridges with the Right Tools: Modality and the Standard Model’, in M. Massimi, J-W. Romeijn, G. Schurz, (eds.), *Proceedings of EPSA2015*, Springer, pp. 37-47, 2017

‘Art, Science and Abstract Artefacts’, in O. Bueno, G. Darby, S. French and D. Rickles (eds.), *Thinking About Science, Reflecting on Art: Bringing Aesthetics and Philosophy of Science Together*, Routledge, pp. 169-190, 2017.

‘Structural Realism and the Toolbox of Metaphysics’ in E. Agazzi (ed.), *Varieties of Scientific Realism: Objectivity and Truth in Science*, Springer, pp. 227-244, 2017.

‘Eliminating Objects Across the Sciences’, in A. Guay and T. Pradeu (eds.), *Individuals Across Sciences*, Oxford University Press, pp. 371-394, 2016.

‘Between Weasels and Hybrids: What Does the Applicability of Mathematics Tell us about Ontology?’ in J-Y Beziau, D. Krause and J. Arenhart (eds.), *Conceptual Clarifications: Tributes to Patrick Suppes*, London: College Publications, pp. 63-86, 2015.

‘Rethinking Outside the Toolbox: Reflecting Again on the Relationship Between Philosophy of Science and Metaphysics’, with K. McKenzie, in T. Bigaj and C. Wuthrich (eds), *Metaphysics in Contemporary Physics*, Poznan Studies in the Philosophy of the Sciences and the Humanities, Rodopi, pp. 145-174, 2015

‘Whither Wave-Function Realism?’, in D. Albert and A. Ney, *The Wave Function*, OUP, pp.76-90, 2013.

‘Handling Humility: Towards A Metaphysically Informed Naturalism’, in A. Cordero and J. I. Galparsoro, *Reflections on Naturalism*, Sense Publishers, pp. 85-104, 2013.

‘The Resilience of Laws and the Ephemerality of Objects: Can A Form of Structuralism be Extended to Biology?’, in D. Dieks et. al. (eds), *Probability, Laws and Structures*, Springer, pp. 187-200, 2012.

‘The Presentation of Objects and the Representation of Structure’, in E. Landry and D. Rickles (eds.), *Structure, Object, and Causality: Proceedings of the Banff Workshop on Structural Realism*, University of Western Ontario Series in Philosophy of Science; Dordrecht: Springer, pp. 3-28, 2012.

‘Introduction’ and ‘Travelling in New Directions’, with Juha Saatsi, in *The Continuum Companion to the Philosophy of Science*, Continuum Press, pp. 1-11 and 337-358, 2011.

- ‘In Defence of Ontic Structural Realism’, with James Ladyman, in A. Bokulich and P. Bokulich, *Scientific Structuralism*, Boston Studies in the Philosophy of Science; Springer pp. 25-42, 2011.
- ‘On the Transposition of the Substantial into the Functional: Bringing Cassirer’s philosophy of Quantum Mechanics into the 21<sup>st</sup> Century’, with A. Cei, in M. Bitbol, P. Kerszberg and J. Petitot (eds.), *Constituting Objectivity, Transcendental Perspectives on Modern Physics*, Western Ontario Series in Philosophy of Science; Dordrecht: Springer pp. 95-115, 2009.
- ‘Symmetry, Invariance and Reference’, in M. Frauchiger and W. K. Essler (eds.), *Representation, Evidence, and Justification: Themes from Suppes. (Lauener Library of Analytical Philosophy; vol. 1)* Frankfurt: ontos verlag, pp. 127-156, 2008.
- ‘Quantum Gravity Meets Structuralism: Interweaving Relations in the Foundations of Physics’, with Dean Rickles in D. Rickles, S. French, and J. Saatsi (eds.), *The Structural Foundations of Quantum Gravity*, Oxford: Clarendon Press, pp. 1-39, 2006.
- ‘Understanding Permutation Symmetry’, with Dean Rickles, in K. Brading and E. Castellani (eds.), *Symmetries in Physics: New Reflections*, Cambridge University Press, pp. 212-238, 2003.
- ‘Inconsistency in Science: A Partial Perspective’ with Newton da Costa, in J. Meheus (ed.), *Inconsistency in Science*, Kluwer Academic Press, pp. 105-118, 2002.
- ‘Quantum Physics and the Ontology of Structures’, in *Physis: Proceedings of the IVth International Ontology Congress (A tribute to John Bell)*, San Sebastian, pp. 175-181, 2001.
- ‘Putting a New Spin on Particle Identity’, in Hilborn, R. and Tino, G. (eds.), *Spin-Statistics Connection and Commutation Relations*, American Institute of Physics, pp. 305-318, 2000.
- ‘Models and Mathematics in Physics: The Role of Group Theory’, in Butterfield, J. and Pagonis, C. (eds.), *From Physics to Philosophy*, Cambridge University Press: 187-207, 1999.
- ‘The Logic of Quanta’, with Décio Krause, in Cao, T. (ed.), *Conceptual Foundations of Quantum Field Theory*, pp. 324-342, Cambridge, Cambridge University Press, 1999.
- ‘Opaque Predicates, Veiled Sets and Their Logic’, with Décio Krause, in Carnielli, W.A. and D’Ottaviano, I.M.L. (eds.), *Advances in Contemporary Logic and Computer Science*, pp. 263-274, Providence, Rhode Island, American Mathematical Society, 1999.
- ‘On the Withering Away of Physical Objects’, in Castellani, E. (ed.), *Interpreting Bodies: Classical and Quantum Objects in Modern Physics*, pp. 93-113, Princeton University Press, 1998.
- ‘A Semantic Perspective on Idealisation in Quantum Mechanics’, with James Ladyman, in Shanks, N. (ed.), *Idealization IX: Idealization in Contemporary Physics: Poznań Studies in the Philosophy of the Sciences and the Humanities*, pp. 51-73, Amsterdam, Rodopi, 1998.

'Partiality, Pursuit and Practice', in Dalla Chiara, M.L. et. al. (eds.), *Structures and Norms in Science: Proceedings of the 10th International Congress on Logic, Methodology and Philosophy of Science*, pp. 35-52, Dordrecht, Reidel, 1997.

'Structures for Space-Time: An Approach through Suppes Predicates [in Portuguese]', with Newton da Costa and Otávio Bueno in Gutierrez, C.B. (ed.), *El Trabajo Filosófico de Hoy en el Continente - Actas del XIII Congreso Interamericano de Filosofía*, pp. 607- 613, Colombia, Sociedade Interamericana de Filosofía, 1995.

'Some Remarks On Sortal Logics and Physics', with Newton da Costa and Décio Krause in Pena, L., de Lorenzo, J. and Etcheverría, J. (eds.), *Calculemos: homenaje al Prof. Miguel Sanchez-Mazas*, Trotta, Madrid, 1994.

'Towards an Acceptable Theory of Acceptance: Partial Structures and the General Correspondence Principle', with Newton da Costa, in S. French and H. Kamminga (eds.), *Correspondence, Invariance and Heuristics: Essays in Honour of Heinz Post*, pp.137 - 158, Dordrecht, Reidel, 1993.

'The Schrodinger Problem', with Newton da Costa and Décio Krause in Bitbol, M. and Darrigol, O. (eds.), *Erwin Schrodinger -Philosophy and the Birth Of Quantum Mechanics*, Paris, Editions Frontieres, 1992.

'Ontology and Paraconsistency', with Newton da Costa in Burkhardt, H. and Smith, S. (eds.), *The Handbook of Ontology and Metaphysics*, Munich , Philosophia Verlag, 1991.

'Gödel's Theorem', 'The Exclusion Principle', 'The Interpretation of Quantum Mechanics', 'Statistical Mechanics' in F.N. Magill (ed.), *Magill's Survey of Science*, , Salem Mass., Salem Press; 1992.

## PAPERS

'A Neo-Kantian Approach to the Standard Model', (in preparation).

'What is a Naturalized Principle of Composition?', with F. Ceravolo, forthcoming in *The American Philosophical Quarterly*.

'The Value of Surprise in Science', with Alice Murphy, *Erkenntnis* 2021 (DOI: <https://doi.org/10.1007/s10670-021-00410-z>)

'Author's Response', Symposium on *There Are No Such Things as Theories*, *Metascience* **30**, pp. 23-29.

'Imagination in Scientific Practice', *The European Journal for the Philosophy of Science* **10**: 27, 2020.

'Defending Eliminative Structuralism and a Whole Lot More (or Less)' *Studies in History and Philosophy of Science* **74**, pp. 22-29, 2019.

'Factualism, Substantialism and Structuralism', *The International Journal of Philosophical Studies* **26**, pp. 701-721, 2018 (DOI: 10.1080/09672559.2018.1542275)

‘Toying with the Toolbox: How Metaphysics Can Still Make a Contribution’, *Journal of General Philosophy of Science* (with commentary by B. Vetter) **49**, pp. 211-230, 2018.

‘Identity Conditions, Idealisations and Isomorphisms: A Defence of the Semantic Approach’, *Synthese* 2017 (DOI 10.1007/s11229-017-1564-z)

‘(Structural) Realism and its Representational Vehicles’, *Synthese* **194**, pp. 3311–3326, 2017.

‘Models and Meaning Change: An Introduction to the Work of Mary Hesse’; Special Virtual Issue of *The British Journal for the Philosophy of Science*: [https://academic.oup.com/bjps/pages/Mary\\_Hesse](https://academic.oup.com/bjps/pages/Mary_Hesse)

‘Response to my Critics’ (Symposium Review), *Metascience*, **25**, pp. 189-206, 2016.

‘Getting Away from Governance: Laws, Symmetries and Objects’, with Angelo Cei, *Méthode – Analytic Perspectives* **3** 2014 (DOI: <http://dx.doi.org/10.13135/2281-0498%2F4>)

‘Semi-realism, Sociability and Structure’, *Erkenntnis*, **78**, pp. 1-18, 2013.

‘Philosophy of Science: A Personal Peek into the Future’, with M. Massimi, *Metaphilosophy* **44**, pp. 230-240, 2013.

‘Thinking Outside the (Tool)Box: Towards a More Productive Engagement Between Metaphysics and Philosophy of Physics’ with K. McKenzie, *The European Journal of Analytic Philosophy* **8**, pp. 42-59, 2012.

‘Unitary Inequivalence as a Problem for Structural Realism’, *Studies in History and Philosophy of Modern Physics* **43**, pp. 121-136, 2012.

‘Empirical Factors and Structural Transference: Returning to the London Account’, with O. Bueno and James Ladyman, *Studies in History and Philosophy of Modern Physics* **43**, pp. 95-103, 2012.

‘Models and structures: Phenomenological and partial’, with O. Bueno and James Ladyman, *Studies in History and Philosophy of Modern Physics* **43**, pp. 43-46, 2012.

‘Can Mathematics Explain Physical Phenomena?’, with O. Bueno, *The British Journal for the Philosophy of Science* **63**, pp. 85-113, 2012.

‘Partial Structures and the Logic of Azande’, *Principia* **15**, pp. 77-105, 2011.

‘How Theories Represent’, with O. Bueno, *The British Journal for the Philosophy of Science* **62**, pp. 857-894, 2011.

‘Are There No Such Things as Theories?’, with Pete Vickers, *The British Journal for the Philosophy of Science* **62**, pp. 771-804, 2011

‘Authors’ Response: Symposium on *Identity in Physics*’, with Décio Krause, *Metascience* **20**, pp. 245-250, 2011.

- ‘Metaphysical Underdetermination: Why Worry?’, *Synthese* **180**, pp. 205-221, 2011.
- ‘Shifting to Structures in Physics and Biology: A Prophylactic for Promiscuous Realism’, *Studies in History and Philosophy of Biological and Biomedical Sciences* **42**, pp. 164-173, 2011.
- ‘The Interdependence of Structures, Objects and Dependence’, *Synthese* **175**, pp. 89-109, 2010.
- ‘Some Remarks on the Theory of Quasi-sets’, with Décio Krause, *Studia Logica* **95**, pp. 101-124, 2010.
- ‘Keeping Quiet on The Ontology of Models’, *Synthese* **172**, pp. 231-249, 2010.
- ‘Genuine Possibilities in the Scientific Past and How to Spot Them’, *Isis* **99**, pp. 568-575, 2008.
- ‘Quantum Sortal Predicates’, with Décio Krause, *Synthese* **154**, pp. 417- 430, 2007.
- ‘Looking for Structure in all the Wrong Places: Ramsey Sentences, Multiple Realizability, and Structure’, with Angelo Cei, *Studies in History and Philosophy of Science*, 37: 633–655, 2006.
- ‘Realism about Structure: The Semantic View and Non-linguistic Representations’, with Juha Saatsi, *Philosophy of Science (Proceedings)* **78** pp. 548-559, 2006.
- ‘Structure as a Weapon of the Realist’, *Proceedings of the Aristotelian Society* **106**, pp. 167-185, 2006.
- ‘A Model-Theoretic Account of Representation (Or, I Don't Know Much About Art ... But I Know It Involves Isomorphism)', *Philosophy of Science (Proceedings)* **70**, pp. 1472-1483, 2003.
- ‘Been There, Done That: Breaking Free From Kuhn', in *The Kuhn Controversy*, special monographic issue of *Social Epistemology*, vol. 17, nos. 2-3, 2003.
- ‘Quantum Vagueness', with Décio Krause, *Erkenntnis* **59**, pp. 97-124, 2003.
- ‘Scribbling on the Blank Sheet: Eddington's Structuralist Conception of Objects', *Studies in History and Philosophy of Modern Physics* **34**, pp. 227-259, 2003.
- ‘Remodelling Structural Realism: Quantum Physics and the Metaphysics of Structure', and ‘The Dissolution of Objects: A Reply to Cao', both with James Ladyman, *Synthese* **136**, pp. 31-56 and pp. 73-77, 2003.
- ‘On Representing the Relationship between the Mathematical and the Empirical', with Otávio Bueno and James Ladyman, *Philosophy of Science* **69**, pp. 452-473, 2002.
- ‘A Phenomenological Approach to the Measurement Problem: Husserl and the Foundations of Quantum Mechanics', *Studies in History and Philosophy of Modern Physics* **22**, pp. 467-491, 2002.



'Getting Out of a Hole: Identity, Individuality and Structuralism in Space-Time Physics', *Philosophica* **67**, pp. 901-919, 2001.

'Theories, Models and Structures: Thirty Years On', with Newton da Costa, *Philosophy of Science* **67** (Proceedings), pp. S116-S127, 2000.

'The Reasonable Effectiveness of Mathematics: Partial Structures and the Application of Group Theory to Physics', *Synthese* **125**, pp.103-120, 2000.

'A Response to *Beyond 2000*', *Studies in Science Education* **35**, pp. 181-186, 2000.

'Identity and Individuality in Quantum Mechanics', *Stanford Encyclopaedia of Philosophy* at <http://www.science.uva.nl/~seop/entries/qt-idind/>.

'Infestation or Pest Control: The Introduction of Group Theory into Quantum Mechanics', with Otávio Bueno, *Manuscrito* **22**, pp. 37-86, 1999.

'Reinflating the Model-Theoretic Approach', with James Ladyman, *International Studies in the Philosophy of Science* **13**, pp. 99-117, 1999.

'A Semantic Perspective on Idealisation in Quantum Mechanics', with James Ladyman, in N. Shanks(ed.), *Idealization IX: Idealization in Contemporary Physics: Poznań Studies in the Philosophy of the Sciences and the Humanities*, Rodopi, pp. 51-73, 1998.

'The Logic of Pragmatic Truth', with Newton da Costa and Otávio Bueno, *The Journal of Philosophical Logic* **27**, pp. 603-620, 1998.

'Is There A Zande Logic?', with Newton da Costa and Otávio Bueno, *History and Philosophy of Logic* **19**, pp. 41-54, 1998.

'Superconductivity and Structures: Revisiting the London Account', with James Ladyman, *Studies in History and Philosophy of Modern Physics* **28**, pp. 363-393, 1997.

'Suppes' Predicates for Space-Time', with Newton da Costa and Otávio Bueno, *Synthese* **112**, pp. 271-279, 1997.

'Quantum Objects are Vague Objects', with Décio Krause, *Sorites* **6**, pp. 21-33, 1996.

'Partial Structures and the Logic of the Azande', with Newton da Costa, *The American Philosophical Quarterly* **32**, pp. 325-339, 1995.

'The Esperable Uberty of Quantum Chromodynamics', *Studies in History and Philosophy of Modern Physics* **26**, pp. 87-105, 1995.

'Hacking Away at the Identity of Indiscernibles', *The Journal of Philosophy* **92**, pp. 455 - 466, 1995.

'Vague Identity and Quantum Non-Individuality', with Décio Krause, *Analysis* **55**, pp. 20 - 25, 1995.

- ‘A Formal Approach to Quantum Non-Individuality’, with Décio Krause , *Synthese* **102**, pp. 195-214, 1995.
- ‘A Model Theoretic Approach to “Natural Reasoning”’, with Newton da Costa, *International Studies in Philosophy of Science* **7**, pp. 177 - 190, 1993.
- ‘Consistency, Omniscience and Truth’, with Newton da Costa, *Philosophical Science* **8**, pp. 51 - 69, 1991. (Russian translation).
- ‘Rationality, Consistency and Truth’, *The Journal of Non-Classical Logic* **7** , pp. 51 - 71, 1991.
- ‘On Russell’s Principle of Induction’, with Newton da Costa, *Synthese* **86**, pp. 285 - 295, 1991.
- ‘The Model-Theoretic Approach in the Philosophy of Science’, with Newton da Costa, *Philosophy of Science* **57**, pp. 248 - 265, 1990.
- ‘Belief, Contradiction and the Logic of Self-Deception’, with Newton da Costa, *American Philosophical Quarterly* **27**, pp. 179 - 197, 1990.
- ‘Metaphysics, Pragmatic Truth and the Underdetermination of Theories’, with Alfredo Pereira jr., *Dialogos* **56**, pp. 37 - 67, 1990.
- ‘Further Remarks on “pragmatic probability, logical omniscience and the Popper-Miller argument”’, with Newton da Costa, *Fundamenta Scientiae* **10**, pp. 229-231, 1989.
- ‘Identity and Individuality in Classical and Quantum Physics’, *Australasian Journal of Philosophy* **67**, pp. 432 - 446, 1989.
- ‘Pragmatic Truth and the Logic of Induction’, with Newton da Costa, *The British Journal for the Philosophy of Science* **40**, pp. 333 - 356, 1989.
- ‘A Note on Temporal Logic’, with Newton da Costa, *The Bulletin of Logic of the Polish Academy of Sciences* **18**, pp. 51 - 56, 1989.
- ‘A Peircean Response to the Realist - Empiricist Debate’, *Transactions of the Charles S. Peirce Society* **25**, pp. 293 - 307, 1989.
- ‘Why the Principle of the Identity of Indiscernibles is Not Contingently True Either’, *Synthese* **78**, pp. 141 - 166, 1989.
- ‘Individuality, Supervenience and Bell’s Theorem’, *Philosophical Studies* **55**, pp. 1 - 22, 1989.
- ‘The Logic of Belief’, with Newton da Costa, *Philosophy and Phenomenological Research* **49**, pp. 431 - 446, 1989.
- ‘A Estrutura do Argumento de Newton para a Lei da Gravitacao Universal’ (The Structure of Newton’s Argument for the Law of Universal Gravitation); *Cadernos de Historia e Filosofia da Ciencia\_Series 2* **1**, pp. 33 - 52, 1989.

‘Pragmatic Probability, Logical Omniscience and the Popper - Miller Argument’, with Newton da Costa, *Fundamenta Scientae* **9**, pp.35 - 46, 1988.

‘Belief and Contradiction’, with Newton da Costa, *Critica* **20**, pp.3 - 11, 1988.

‘Models, Pragmatic Virtues and Limited Scepticism : The Three Pillars of Constructive Empiricism’; *Manuscrito* **11**, pp.27 - 46, 1988.

‘A Green Parrot is Just as Much a Red Herring as a White Shoe : A Note on Confirmation, Background Knowledge and the Logico-Probabilistic Approach’, *The British Journal for the Philosophy of Science* **39**, pp.531 - 535, 1988.

‘Quantum Physics and the Identity of Indiscernibles’, with Michael Redhead, *The British Journal for the Philosophy of Science* **39**, pp.233 - 246, 1988.

‘First Quantised Paraparticle Theory’; *International Journal of Theoretical Physics* **26**, pp.1141 - 1163, 1987.

## BOOK REVIEWS

Numerous reviews in *Metascience*.

Review of Andreas Hüttemann, *A Minimal Metaphysics for Scientific Practice*, Cambridge University Press, 2021, *British Journal for the Philosophy of Science* (forthcoming).

Review of T. Sider, *The Tools of Metaphysics and the Metaphysics of Science*, Oxford University Press, 2020, *Mind* **131**, pp. 361-369, 2022.

Review of A. Wilson, *The Nature of Contingency: quantum physics as modal realism*, Oxford University Press, 2020, *Metascience* **29**, 2020.

Review of Frode Kjosavik and Camilla Serck-Hanssen (eds.), *Metametaphysics and the Sciences: Historical and Philosophical Perspectives*, Routledge, 2020, *Notre Dame Philosophical Reviews* 2020.05.02

Symposium Review of B. Wray, *Resisting Scientific Realism*, Cambridge University Press 2018, *Metascience* **29** pp. 5-10, 2020.

Review of William M.R. Simpson, Robert C. Koons and Nicholas J. Teh (eds.), *Neo-Aristotelian Perspectives on Contemporary Science*, Routledge 2018, *Notre Dame Philosophical Reviews*, 2018.04.21

Review of G. Schurz, *Philosophy of Science: A Unified Approach*, Routledge, 2014, *Journal for General Philosophy of Science*, **46**, pp. 241-243, 2015

Review of D. Krause and A. Videira (eds.), *Brazilian Studies in Philosophy and History of Science* (Springer 2011), *Metascience*, **21**, pp. 273-275, 2012

- Review of H. Gumbrecht, R. Harrison, Michael Hendrickson and R. Laughlin, *What is Life? The Intellectual Pertinence of Erwin Schrödinger*. (Stanford University Press 2011), *Isis*, **103**, p. 191, 2012.
- Essay review of H. Beebe, C. Hitchcock and Peter Menzies (eds), *The Oxford Handbook of Causation* (OUP 2009), *Metascience*, **20**, pp. 543-548, 2011.
- Review of E. Grosholz's *Representation and Productive Ambiguity in Mathematics and the Sciences*, *British Journal for the Philosophy of Science*, **62**, pp. 895-898, 2011.
- Review of J.T. Roberts, *The Law-Governed Universe* (OUP 2008), *The Philosophical Quarterly*, **245**, pp. 872-873, 2011.
- Review of T. Horgan and M. Potrc's *Austere Realism: Contextual Semantics Meets Minimal Ontology* (MIT Press 2008), *The Philosophical Quarterly*, **242** pp. 201-202, 2011.
- Review of R.I.G. Hughes, *The Theoretical Practices of Physics* (OUP 2009), *Analysis*, **70**, pp. 601-603, 2010.
- Review of B. Falkenburg's *Particle Metaphysics: A Critical Account of Subatomic Reality*, *Studies in History and Philosophy of Modern Physics* **40**, pp. 194-195, 2009.
- Review of B. van Fraassen's *Scientific Representation: Paradoxes of Perspective*, *Times Higher Education Supplement* 6 Nov. 2008.
- Review of B. Rosenblum's and F. Kuttner's *Quantum Enigma*, Oxford: OUP 2006), *The Review of Metaphysics* **61**, pp. 33-34, 2008.
- Review of B. d'Espagnat's *On Physics and Philosophy* (Princeton: Princeton University Press), *Physics Today*, **60**, p.108, June 2007.
- Review of D. Kaiser's *Drawing Theories Apart: The Dispersion of Feynman Diagrams in Postwar Physics* (Chicago: University of Chicago Press 2005), *Isis*, **97**, pp. 185-186, 2006.
- Review of A. Watson's *The Quantum Quark* (Cambridge: Cambridge University Press 2004), *Isis*, **97** pp. 191-192, 2006.
- Review of D. Albert's *Time and Chance* (Cambridge: Harvard University Press, 2002), *Mind* **114**, pp. 113-116, 2005.
- Review of S. Weinberg's *Facing Up; Science and its Cultural Adversaries*, (Cambridge: Harvard University Press, 2003), *British Journal for the History of Science*, **37**, pp. 491-492., 2004.
- Review of S. Haack's *Defending Science – within reason* (Amherst: Prometheus Books, 2003), *The Philosophical Quarterly*, **55**, pp. 530-532.

Review of M. Lange's *An Introduction to the Philosophy of Physics: Locality, Fields, Energy, and Mass* (Blackwell, 2002), *Philosophical Books* **45**, pp. 180-181, 2004.

Review of H. Kragh's *Quantum Generations: A History of Physics in the Twentieth Century* (Princeton University Press, 1999 rep. 2002),

Review of André Fuhrmann's *An Essay on Contraction* (Stanford, CSLI Publications, 1997), with Otávio Bueno, *British Journal for the Philosophy of Science* **51**, pp. 513-517, 2000.

Review of Chris Mortensen's *Inconsistent Mathematics* (Dordrecht, Kluwer, 1995), with Otávio Bueno, *Studia Logica*, 1999.

Essay Review of *Fritz London*, by C. Gavroglu; *Studies in History and Philosophy of Modern Physics* **30** pp. 267-281, 1999.

Review of *Constitutions of Matter*, by M.H. Krieger; *The British Journal for the Philosophy of Science* **49**, pp. 355-358, 1998.

Review of *Theories and Models in Scientific Processes; Pozna'ń Studies in the Philosophy of the Sciences and the Humanities*, eds. W.E. Herfel, W. Krajewski, I. Niiniluoto and R. Wójcicki; *The British Journal for the Philosophy of Science* **47**, pp. 658-662, 1996.

Review of *Quantum Mechanics: An Empiricist Approach*, by B. van Fraassen; *The British Journal for the Philosophy of Science* **46**, pp. 436 - 439, 1995.

Review of *The Philosophy of Physics*, by L. Sklar; *The Philosophical Quarterly* **177**, pp. 538 - 540, 1994.

Review of *The Logicworks*, with Hamner Hill; *Computers and Texts* **3**, pp. 11 - 12, 1992.

Review of *Asymmetries in Time*, by P. Horwich; *Nous* **24**, pp. 804 - 806, 1990.

Review of *The Neglect of Experiment*, by A. Franklin; *Nous* **24**, pp. 631 - 634, 1990. (Extended version in Portuguese in *Cadernos de Historia e Filosofia da Ciencia\_Serie 2* **1**, pp. 275 - 281, 1989.)

Critical Study of *In Contradiction*, by G. Priest, with Newton da Costa, *The Philosophical Quarterly* **39**, pp. 498 - 502, 1989.

Review of *Understanding Science : A Cognitive Approach*, by R. Giere; *The American Journal of Physics* **57**, pp. 572 - 573, 1989.

Review of *In Contradiction*, by G. Priest, with Newton da Costa, *History and Philosophy of Logic* **10**, pp. 115 - 120, 1989.

Review of *Individuality : An Essay on the Foundations of Metaphysics*, by J.J.E. Gracia; *Manuscrito* **11**, pp. 135 - 137, 1988.

Review of *Energy, Force and Matter* and *Metaphysics and Natural Philosophy*, by P.M. Harman; *The British Journal for the Philosophy of Science* **35**, pp. 297 - 301, 1984.

## SELECTED PAPERS READ

‘Does *The Theory of Observation in Quantum Mechanics* Complete the Crisis?’, Third Annual Phenomenological Approaches to Physics Conference: QBism and Phenomenology, Linköping, June 2022.

‘Does the claim that there are no theories imply that there is no history of theories to be written?(!)’, *Biennial Meeting of the European Philosophy of Science Association*, Turin, September 2021 (Plenary).

‘Phenomenology, Perspectivalism and (Quantum) Physics’, *Metaphysics from a Human Point of View*, Edinburgh, April 2021.

‘Does the claim that there are no theories imply that there is no history of theories to be written?(!)’, *Conversatorios Sobre Filosofía e Historia de la Ciencia Desde el Cono Sur*, May 2021.

‘Consciousness and Quantum Physics’, Glasgow University Philosophy Society, University of York Philosophy Society, November 2020.

‘Resisting the Romance of Revolutions: The Role of Mathematics in Theory Change’, *The Applicability of Mathematics*, Leeds September 2019.

‘What is This Thing Called Structure? (Rummaging in the Toolbox of Metaphysics for an Answer)’, *Structure of Reality and the Reality of Structure*, Rotterdam June 2019.

‘Scribbling on the Blank Sheet: Braithwaite vs. Eddington and The Structuralist Conception of Objects’, *Arthur S. Eddington: From Physics to Philosophy and Back Again*, Paris, May 2019

‘Imagination in Art and Science’, Symposium on Imagination in Science, *Biennial Meeting of the Philosophy of Science Association*, Seattle, November 2018

‘Representation and Realism: On Being a Structuralist All the Way (Up and) Down’, *Lauener Symposium*, Bern, September 2018

‘From a Lost History to a New Future: Is a Phenomenological Approach to Quantum Physics Viable?’, *Phenomenological Approaches to Physics*, Graz, June 2018.

‘Looking at the World from the Top Down: A Defence of Well-Rounded Structure’, Symposium: Radical Ontic Structural Realism, American Philosophical Association, Baltimore, December 2016.

‘Building Bridges with the Right Metaphysical Tools: Modality and Modern Science’, Society for Realism and Anti-Realism, American Philosophical Association, Baltimore, December 2016.

‘Underdetermination, Structure and the Quantum State’, Realism, Underdetermination and Quantum Physics, Leeds, May 2016.

‘The Air Pump and Scientific Laws’, HPS in 20 Objects (public seminar series), Leeds, May 2016.

‘To Boldly Go: What Star Trek Tells Us About How Science Works’, LSE Literary Festival, London, February 2016.

‘A Neo-Kantian Approach to the Standard Model’, Neo-Kantian Perspectives on the Exact Sciences, Konstanz, January 2016.

‘Modality in Modern Physics:” Between Humeanism and Dispositionalism’, Dept. of Philosophy, University of Konstanz, January 2016.

‘Between Humeanism and Dispositionalism: Or How to Construct a Modal Framework for Modern Science by Appropriating Metaphysical Devices’, New Trends in Metaphysics of Science, Paris, December 2015.

‘Doing Away with Dispositions: Powers and Potentiality in the Context of Modern Physics’, Dept. of Philosophy, University of Nottingham, November 2015.

‘Building Bridges with the Right Tools: Modality and the Standard Model’ European Philosophy of Science Association, Biennial Conference, Dusseldorf, September 2015

‘Toying with the Toolbox: How Metaphysics can still Make a Contribution’, German Analytic Philosophy Conference, Osnabruck, September 2015.

‘Response to Comments’, Author Meets Critics Session, Society for Realism and Anti-Realism, Pacific APA, April 2015.

‘Doing Away with Dispositions: Powers in the Context of Modern Physics’, Real Absences, Real Possibilities Workshop, Köln, December 2014.

‘Structural Realism and the Standard Model’, XI International Ontology Congress, San Sebastian, September 2014.

‘Eliminating Objects in the Philosophies of Art and Science’ Shaping The Trading Zone: Bringing Aesthetics and Philosophy of Science Together, Leeds, September 2014.

‘Realism and its Representational Vehicles’, New Thinking about Scientific Realism, Cape Town, August 2014.

‘Between Braque and Beethoven: Theories as Representations and Objects’, Philosophy in the Forest Conference, Netherlands, May 2013.

‘Structural Explanations and the Role of Mathematics in Science’, Workshop on Explanation in the Sciences, University of Louvain-la-Neuve, May 2013.

‘Enabling Eliminativism: Or Putting Metaphysics to the Service of Realism, Workshop on the Metaphysics of Scientific Realism, University of Athens, March 2013.

‘What Kinds of Things are Theories?’, Café Scientifique, Halifax, January 2013.

‘Enabling Eliminativism: or Taking a Viking Approach to Metaphysics’, Symposium: Science and Metaphysics, APA (Eastern Division), Atlanta, December 2012.

‘The Might of Modal Structuralism’, Society for Realist-Antirealist Discussion, APA (Eastern Division), Atlanta, December 2012.

‘Thinking Outside the Toolbox: Towards a More Productive Engagement Between Metaphysics and Philosophy of Science’, University of Edinburgh (Student Philosophy Society), December 2012.

‘Between Braque and Beethoven: Theories as Representations and Objects’, Trinity College, Dublin, November 2012.

‘Eliminating Objects Across the Sciences’, Individuals Across the Sciences, Paris, May 2012.

‘Thinking Outside the Toolbox: Towards a More Productive Engagement Between Metaphysics and Philosophy of Science’, University of Vienna, March 2012.

‘Eschewing Entities: Outlining a Biology Based Form of Structural Realism’, Biennial Meeting of the European Philosophy of Science Association, Athens, September 2011.

‘Quantum Indeterminacy and Multiple Actualities’, British Society for the Philosophy of Science Annual Conference, University of Sussex, July 2011.

‘Doing Away with Dispositions: Towards a Law-Based View of Modality in Science’, Department of Philosophy, University of Florence, March 2011.

‘Doing Away with Dispositions: Towards a Law-Based View of Modality in Science’, Philosophy of Physics Seminar, Faculty of Philosophy, University of Oxford, February 2011.

‘Shifting to Structures in Physics and Biology: A Prophylactic for Promiscuous Realism’, *Points of Contact between the Philosophy of Physics and the Philosophy of Biology*, London School of Economics, December 2010.

‘Structuralism, Dispositions and Laws’, *Structuralism Workshop*, University of Notre Dame, November 2010.

‘There are No Such Things as Theories’, History and Philosophy of Science Seminar, University of Notre Dame, November 2010.

‘Mixing in the Metaphysics: How Humble Should the Realist Be?’, seminar, *Institute of History and Philosophy of Science*, University of Toronto, November 2010.

‘Between Weasels and Hybrids: What Does the Applicability of Mathematics tell us about Ontology?’, *Workshop on the Applicability of Mathematics*, University of Toronto, November 2010.



‘Mixing in the Metaphysics: How Humble Should the Realist Be?’, *Boston Colloquium for the Philosophy of Science: 50<sup>th</sup> Anniversary Celebration*, Boston, April 2010.

‘The Dependence of Objects on Structure: Tailoring Our Metaphysics to Fit Our Physics’, *Part and Whole in Physics Workshop*, Leiden, March 2010.

‘Are There No Things That Are Scientific Theories?’, *Philosophy Colloquium, University of Miami*, Miami, February 2010.

‘Disentangling Mathematical and Physical Explanation’, *Mathematical and Geometrical Explanations in Physics*, Bristol, December 2009.

‘Getting Away from Governance: A Structuralist Approach to Laws and Symmetries’, *Laws of Nature Workshop*, Athens, December 2009.

‘Laws and Objects: A Neo-Kantian Template for the Structuralism Debate’, with Angelo Cei, *Second Conference of the European Philosophy of Science Association*, Amsterdam, October 2009.

‘Metaphysical Humility and the Argument for Structural Realism’, and ‘The Representation of Structure’, *International Conference on Structural Realism and the Philosophy of Physics*, Wuhan, China, July 2009.

‘Are There No Things That Are Scientific Theories’, with Pete Vickers, *Annual Conference of the British Society for the Philosophy of Science*, Norwich, July 2009

‘How Much Metaphysics Should the Realist Take with her Tea?’, *Scientific Realism Revisited*, LSE, London April 2009.

‘Authors Meet Critics: Symposium on French and Krause, *Identity in Physics*’, *American Philosophical Association*, Vancouver, April 2009.

‘Shifting to Structures in Physics and Biology: A Prophylactic for Promiscuous Realism’, *Physics Meets Biology: Perspectives from Philosophy, History and Science*, Royal Society of Edinburgh, November 2008.

‘Laws and Objects: A Neo-Kantian Template for the Structuralism Debate’, with Angelo Cei, *Annual Conference of the British Society for the Philosophy of Science*, St. Andrews, July 2008

‘Metaphysical Underdetermination: Why Worry?’, *Theoretical Frameworks and Underdetermination*, Dusseldorf, April 2008.

‘Structuralism and the Enigmas of Modern Physics’, *Annual Meeting of the Swiss Society for Logic and Philosophy of Science*, Lausanne, November 2007.

‘The Structure of Representation and the Representation of Structure’, *Structure, Objects and Causality*, Banff, Canada, August 2007.

'Bringing Structure Out of the Shadows', *Fifth International Principia Symposium: The Philosophy of van Fraassen*, Florianopolis, Brazil, July 2007.

'The Limits of Structuralism', *Presidential Address to the British Society for the Philosophy of Science*, London, June 2007.

'The Interdependence of Structure, Ontology and Dependence', *Structuralism about Physics and Mathematics*, Bristol, December 2006.

'Structure as a Weapon of the Realist', *The Aristotelian Society*, London, January 2006.

'Structure and Objects in Modern Physics', *Philosophy of Physics Seminar*, Oxford, October 2005.

'The World as Structure', *R.I.P. lecture*, Bradford University, May 2003.

'From Poincaré's Crutch to Melia's Weasel: Can the Structural Realist Have Her Referential Cake and Eat it Too?', *British Society for the Philosophy of Science*, January 2003.

'A Model-Theoretic Approach to Representation', *PSA 2002, The Philosophy of Science Association Eighteenth Biennial Meeting*, Milwaukee, U.S.A., November 2002.

'Physical Knowledge is Structural Knowledge: The Past and Future of Structural Realism' and 'Quantum Physics and the Ontology of Structures (or, John Bell Meets James Ladyman!)', Cologne University, July 2002.

'From Groups to Gestalt: Structuralist Responses to Quantum Indistinguishability', one day conference on *Structuralism in Twentieth Century Physics*, University of Leeds, June 2002.

'Reason, Reference and the Search for Objects', one day conference on *Structural Realism and Newman's Problem*, London School of Economics, March 2002.

'Scribbling on the Blank Sheet: Eddington's Structuralist Conception of Objects', *Annual Conference of the British Society for the Philosophy of Science*, York, July 2001.

'Symmetry, Structure and the Constitution of Objects', *Conference on Symmetries in Physics: New Reflections*, University of Oxford, January 2001; available at <http://www.philosophy.ox.ac.uk/physics/contents.html#4>.

'The World as Structure', *Philosophy Seminar*, King's College, University of London, Jan. 2001.

'Putting a New Spin on Quantum Identity', *Spin-Statistics Conference*, Italy, June 2000.

'A Phenomenological Approach to the Measurement Problem', *Philosophy of Physics Seminar*, University of Oxford, June 2000.

'Remodelling Structural Realism', *Belgian Society for the Philosophy of Science*, Brussels, April 1999.

'Infestation or Pest Control: The Introduction of Group Theory into Quantum Mechanics', *Research*

*Seminar*, Centre for Logic and Philosophy of Science, University of Ghent, Ghent, Belgium, April 1999.

'A Phenomenological Approach to the Measurement Problem', *Graduate Seminar*, Dept. of Philosophy, Free University of Brussels, Brussels, April 1999.

'Reinflating the Semantic Approach', *Departmental Seminar*, Dept. of Philosophy, University of Durham, November 1998.

'Structures and Objects in Mathematics and Physics', *World Congress of Philosophy*, Boston, USA, August 1998.

'Inconsistency in Science', *Philosophy Society*, Kings College London, January 1998.

'Theories and Models, Thirty Years on', with Newton da Costa, *Biennial Meeting of the Philosophy of Science Association*, October 1998.

'Prospects for Structural Realism', *Annual Meeting of the British Society for the Philosophy of Science*, September 1997.

'The Logic of Quanta', *Boston Colloquium in the Philosophy of Science: A Historical Explanation and Philosophical Foundations of Quantum Field Theory*, March 1996.

'Vagueness and Quantum Mechanics', *Annual Meeting of the British Society for the Philosophy of Science*, September 1995.

'Partiality, Pursuit and Practice', *10th International Congress of Logic, Methodology and Philosophy of Science*, August 1995.

'Partiality, Pursuit and Practice', *British Society for the Philosophy of Science*, December 1994.

'On the Withering Away of Physical Objects', *The Sigma Club*; Dept. of History and Philosophy of Science, University of Cambridge, June 1994.

'Hobgoblins and Angels: Inconsistency in "Natural" and Scientific Reasoning', *Senior Seminar*, Dept. of Philosophy; University of Leeds, February 1994.

'Hobgoblins and Angels: Inconsistency in "Natural" and Scientific Reasoning', *Alexander Society*, Dept. of Philosophy; University of Manchester, January 1994.

'Hacking Away at the Identity of Indiscernibles: Possible Worlds and Einstein's Principle of Equivalence', *Eastern Division Meeting of the American Philosophical Association*; Washington D.C., December 1992.

'Some Considerations Regarding the Construction of a Pragmatic Realism', *Annual Conference of the Brazilian Society for the Advancement of Science*, University of São Paulo, July 11 1988.

'Quantum Physics and the Identity of Indiscernibles', *VIII Logic, Methodology and Philosophy of Science Congress*, Moscow, August 15 - 22 1987.

‘Individuality and Quantum Physics’; *Annual Conference of the British Society for the Philosophy of Science*, Warwick University, September 21 - 23 1984.

‘Boltzmann Statistics and Individuality’; *International Conference on Ludwig Boltzmann*, Vienna, September 4 - 7 1981.

## **SELECTED CONFERENCES/SYMPOSIA ORGANISED**

*Scientific Realism and the Quantum*, two day conference (with Juha Saatsi), University of Leeds, September 2017.

*The Aesthetics of Science*, two day conference (with Milena Ivanova), University of Leeds, July 2017.

*Imagination in Science*, workshop (with Alice Murphy), University of Leeds, June 2017.

*Shaping the Trading Zone: Aesthetics meets Philosophy of Science*, two-day conference, University of Leeds, September 2014

*Objects, Kinds and Mechanisms in Biology*, workshop, University of Leeds, April 2012.

*Structuralist Approaches to Quantum Gravity*, workshop, Philosophy of Science Association Biennial Meeting, Wisconsin, November 2002.

*Structuralism and Twentieth Century Physics*, one day conference, Leeds, June 14<sup>th</sup> 2002.

*Philosophical Foundations of Quantum Gravity*, one day conference, Leeds, July 4<sup>th</sup> 2001.

*The Structure of Scientific Theories, Thirty Years On*, symposium co-organised with Nick Huggett, Philosophy of Science Association Biennial Meeting, Kansas City, November 1998.

*British Society for the Philosophy of Science Annual Meeting*, co-organised with Anna Maidens, Leeds, September 1995.

*Workshop on the Foundations of Quantum Mechanics*, co-organised with Vincent Buonamano, Centre of Logic, Epistemology and History of Science, State University of Campinas, November 1987.

## **OTHER RESEARCH RELATED ACTIVITIES**

Co-editor of *British Journal for the Philosophy of Science* 2011-2020.

Series editor of *New Directions in Philosophy of Science*, Palgrave-Macmillan, 2008-2020.

Member of Standing Committee, *European Philosophy of Science Association* 2009-2011, 2011-2013.

Member of Program Committee of *Philosophy of Science Association* 2012.

Editor-in-Chief of reviews journal *Metascience* 2003-2009

Member of editorial board of *Metascience* 2001-2009

Co-edited (with Décio Krause) special issue of *Synthese* in honour of Newton da Costa.

Judge (1 of 3) of *Philosophy of Science Association* graduate essay competition, 2001.

Referee for *British Journal for the Philosophy of Science*, *Studies in History and Philosophy of Modern Physics*, *Philosophy of Science*, *Foundations of Physics*, *Foundations of Chemistry*, *Mind*, *Philosophy and Phenomenological Research*, *Philosophers Imprints*, *Dialectica* and others.

Reader for *Kluwer Academic Publishers*, *Oxford University Press*, *Palgrave-Macmillan*, and *Routledge and Kegan Paul* and others.

Reviewer for various funding bodies including *U.S. National Science Foundation*, *Swiss National Science Foundation*, *Institució Catalan de Recerca i Estudis Avançats*.

External referee for tenure, promotion and research fellowship applications at various institutions, including *London School of Economics*, *Universities of Boston*, *Cambridge*, *Illinois*, *Notre Dame*, *Oxford*, *South Carolina* and *Toronto*.

## ADMINISTRATIVE ACTIVITIES

2012 – 2014	Vice-President, Leeds UCU
2012	Director, Centre for HPS, University of Leeds
2005 – 2015	Member of University Senate
2006 – 2009	Head of Department of Philosophy, Chair of Joint Committee of the University and UCU
2004 – 2008	Committee member, British Society for the Philosophy of Science
2001 – 2009; 2011 – 2018	Committee member, Leeds UCU
2005 – 2007	President, British Society for the Philosophy of Science
2005 – 2006	Vice-President Leeds AUT, Chair, Division of History and Philosophy of Science
2001 – 2005	Member of Faculty of Arts Research Management Committee, member of Faculty of Arts Readerships Committee, Equal Opportunities Officer for Leeds Association AUT

2000 - 2001	Schools Liaison Officer
1996 - 1999	Chair, Division of History and Philosophy of Science, member of various departmental committees, School of Philosophy, University of Leeds.
1996 - 1997	Taught Courses Committee (Board of Arts), University of Leeds
1994 - 1995	Taught Courses Committee (Board of Arts), University of Leeds
1993 - 1995	Postgraduate Admissions Tutor, Coordinator MA in Philosophy, member of various departmental committees, Dept. of Philosophy, University of Leeds.
1989 - 1993 :	Member of various college level committees, Southeast Missouri State University.
1992 - 1993 : State	Departmental Representative on Faculty Senate, Southeast Missouri University.
1989 :	Chairperson of International Studies Sub-Committee on the Minor, Southeast Missouri State University.
1986 - 1988 :	Acting Head of Dept., Dept. of Philosophy, State University of Campinas, (January, March 1987; January 1988) Member of various departmental and institutional committees, including Ph.D. defence and postgraduate admissions committees.

## **MEMBERSHIP OF SOCIETIES**

British Society for the Philosophy of Science  
European Philosophy of Science Association  
Philosophy of Science Association  
Elected Member of the Centre of Logic, Epistemology and History of Science, State University of Campinas

## **AWARDS AND GRANTS**

2009-2011	Major Research Scholarship, Leverhulme Trust
1999 - 2000	University Study Leave Award; Departmental Study Leave Award.
August 1997	British Academy Visiting Scholar, Peru.
1995 - 1996	Sabbatical, granted by the Department of Philosophy, University of Leeds.
1990 - 1993 :	Faculty Development Support, Southeast Missouri State University.

- 1992 : Faculty Merit Award, Southeast Missouri State University.
- 1992 : University Grant (to travel to Brazil), Southeast Missouri State University.
- 1990 : Faculty Merit Award, Southeast Missouri State University.
- 1986 - 1988 : Research Scholarship from the Brazilian National Council for Scientific and Technological Development.
- 1987 : Travel grant (to attend Moscow Conference) from the Research Support Foundation of the State of Sao Paulo.
- 1986 : Library Support Grant from the Brazilian National Council for Scientific and Technological Development.