# JOHN SYMONS

Department of Philosophy, 3074 Wescoe Hall, University of Kansas johnsymons@ku.edu http://johnfsymons.net

# **ACADEMIC APPOINTMENTS**

2012 - present Professor, Department of Philosophy, University of Kansas

2010 - 2011	Fundación Séneca-Agencia de Ciencia y Tecnología de la Región de Murcia, Project 11944/PHCS/09 (35,000)(Paco Calvo and John Symons)
2009 - 2010	John Templeton Foundation Individual Research Award (\$67,000)
2009 - 2011	CETAL Faculty, Center for Excellence in Teaching and Learning
2005	Large Class Academy Stipend, Center for Excellence in Teaching and Learning, University of Texas
	at El Paso
2002 - 2003	University of Texas System, University Research Institute Award
1998 - 1999	Dibner Predoctoral Fellowship, Massachusetts Institute of Technology
1998	Humanities Foundation Award, Boston University
1997 - 1998	Junior Fellowship, Institut für die Wissenschaften vom Menschen, Vienna
1997	Peter Bertocci Scholarship, Boston University
1997	Machette Prize for best graduate student paper of 1996-97, Boston University
1994	Oakes and Louise Ames Prize for best undergraduate thesis at Connecticut College
1993	Suzanne K. Langer Award, Connecticut College

# PROFESSIONAL ASSOCIATIONS AND OFFICES

World Congress of Philosophy (Beijing) Co-chair for Philosophy of the Life Sciences 2017 - 2018

2015 - present

# **PUBLICATIONS**

### Journal special issues edited

Between Logic and Intuition: The Philosophy of David Lewis, a special issue of Synthese March 2013

Social Structures in Communication Networks a special issue of *International Journal of Agent Systems and Technologies* 1(4) [2009]

## **Articles and Book Chapters**

- "Hintikka's view of logic" (Under Review)
- "Meaning and Ultimate Value" (Under Review)
- "Technological Diversity in IoT can Promote System-Level Resilience: A Simulation and Analysis Approach" (With Amir Moderrasi and James Sterbenz) (Under Review)
- "Should Physical Computation be Understood Mechanistically?" APA Newsletter on Philosophy and Computers (forthcoming)
- "Understanding error rates in software engineering: Conceptual, empirical, and experimental approaches" (With Jack Horner) *Philosophy and Technology* (forthcoming)
- "Why there is no general solution to the problem of software verification" (with Jack Horner)

- "Teleosemantics and Natural Information" In Luciano Floridi (ed) *Routledge Companion to Philosophy of Information* (2016) pp. 263-277.
- "Physicalism, Scientific Respectability, and Strongly Emergent Properties." In Tudorel Dima and Mihaela Luca (eds.) *Cognitive Sciences: An Interdisciplinary Approach.* Bucharest: Pro Universitaria (2015) pp. 14-37
- "Software Intensive Science" (with Jack Horner) Philosophy and Technology, Volume 27, Issue 3, pp 461-477, 2014
- "Reply to Angius and Primiero on Software Intensive Science" (with Jack Horner) *Philosophy and Technology* Volume 27, Issue 3, pp 491-494, 2014
- "Computing with Bodies: Morphology, Function, and Computational Theory." in Charles Wolfe (ed.) *Brain Theory:* Essays in Critical Neurophilosophy New York: Palgrave pp. 91-106, 2014
- "The Emergence of Systematicity in Minimally Cognitive Agents" (with Paco Calvo and Emma Martin) in *The Architecture of Cognition: Rethinking Fodor and Pylyshyn's Systematicity Challenge* Co-edited with Paco Calvo Cambridge: MIT press 397-434, 2014
- "Systematicity: An Overview" (with Paco Calvo) in *The Architecture of Cognition: Rethinking Fodor and Pylyshyn's Systematicity Challenge* Co-edited with Paco Calvo Cambridge: MIT press 3-30, 2014

"Novel properties generated by interacting computational systems: A minimal model" (with Fabio Boschetti *Complex Systems* 20, 151-164, 2011

"Logic and Formal Semantics for Epistemology" in Routledge Companion to Epistemology

Louçã, J, Rodrigues, D., Morais, A.) *Proceedings of the 21st European Conference on Modelling and Simulation ECMS 2007*, Ivan Zelinka, Zuzana Oplatková, Alessandra Orsoni, ed. Prague: *ECMS* pp. 229-234, 2007

"Quine, Barcan-Marcus and Kripke on Modality" Southwest Philosophical Studies 29, 49-54, 2007

"No Mere Formality: On Why Formal Philosophy Matters" (with Vincent Hendricks) *The Philosophers' Magazine* 3rd quarter 35-38, 2007

"Where's the Bridge? Epistemic logic and epistemology" (with Vincent Hendricks) *Philosophical Studies* 128:137-167, 2006

"The Results are in: On the scope and import of Hintikka's philosophy", (With Daniel Kolak) in *Questions, Quantifiers and Quantum Physics*. New York: Springer 190-258, 2004

"Systems of visual identification in neuroscience: Lessons from epistemic logic." With Jaakko Hintikka *Philosophy of Science* 70: 89-104, 2003 Reprinted in Hintikka, J. *Socratic Epistemology: Explorations of Knowledge-Seeking by Questioning.* Cambridge

## **PRESENTATIONS**

Imagining the Thinking Thing; on the role of Imagination in Descartes' *Meditations*Twentieth World Congress of Philosophy, Boston MA (August 16, 1998)

Explanation in Neuroscience: Complex Systems and Cognition Second International Conference on Complex Systems, Nashua NH (October 29, 1998)

Emergentism and Levels-Talk

Department of Philosophy, Connecticut College, New London (February 18, 1999)

Levels of Explanation in the Brain Sciences

Center for Theoretical Studies, Charles University, Prague. (October 10, 1997) Boston Colloquium for the Philosophy and History of Science, Boston (November 17, 1999)

Modal logic, set theory, and category theory in contemporary philosophy

Mathematics Department Colloquium, New Mexico State University, Las Cruces NM. (May 3, 2007)

### Pattern-oriented analysis of communication flow

21st European Conference on Modelling and Simulation, Prague (June 5, 2007) [Presented by Jorge Louca]

Emergence in social networks: modeling the properties of multi-agent systems

Complexity Sciences: Mathematics and Innovation Arrabida, Portugal. (July 4, 2007)

The Fourth Conference of the European Social Social Simulation Association, Toulouse (September 10-14, 2007) [Presented by Jorge Louca]

## Detecting emergence in the interplay of networks

UACJ, Ciudad Juarez (September 22,2007)

Levels of Reality Conference, Bolzano (October 18, 2007)

Emergent Agents and Socialities: Social and Organizational Aspects of Intelligence, Association for the Advancement of Artificial Intelligence, Washington D.C. (November 8-11, 2007)

### Models of emergence

ICC Workshop on Complexity in Social Systems, Lisbon (Keynote Speaker) (January 11, 2008)

Collective agency and sampling; the benefits of sortition Semin

Lisbon University Institute, PhD program in complexity. (July 4, 2009) Emergence in the physical and social sciences, Arrabida http://www.assystcomplexity.eu/video.jsp?id=13 (July 7, 2009)

What are complexity and emergence? Some reflections on entropy and individuation in toy worlds.'
University of Sydney, Department of Philosophy Colloquium. (August 5, 2009)

## Network dynamics and computational models of emergence

University of Pittsburgh, Center for Philosophy of Science 'Emergence and Reduction in the Sciences' (December 12, 2009)

University of Lisbon, Faculty of Sciences, Department of History and Philosophy of Science (January 18, 2010)

Lehigh University, Department of Philosophy Colloquium, (February 12, 2010)

#### The incompleteness of physicalism

University of Southern Illinois, (July 17, 2010)

### Complexity and the laws of nature

European Conference on Complex Systems (September 13, 2010)

#### Reversibility and transients in computational models

'The Limits of the Knowledge Society' The Romanian Academy, Iasi, Romania. (October 8 2010) Delivered by videoconference.

### **Embodied computation**

University of Pittsburgh 'Workshop on embodied cognition' (March 20, 2011)

### Predictions from computational models: Some epistemic and political challenges

Keynote Address. 'Politics and Knowledge' Romanian Academy, Iasi, Romania. (November 30, 2011)

### Why models' outputs should be interpreted as predictions (with Fabio Boschetti)

MODSIM International Conference on Modelling and Simulation, (

 $\dots$  and no surprises, please.

Department Colloquium, Department of Philosophy, University of Bucharest, Department of Philosophy. (November 26, 2015)

## Progress in Posthuman Science.

Instituto de Investigaciones Filosóficas - Universidad Nacional Autónoma de México. (October 19, 2015) Institute for Research in the Humanities, University of Bucharest (IRH-ICUB) (November 28, 2015)

### Hintikka as Philosophical Nonconformist

American Philosophical Association Pacific Division. (April 2, 2016)

### Hintikka's view of logic

Memorial Conference on Hintikka. University of Helsinki (September 9, 2016)

#### **Brute Facts**

Midwest Annual Workshop on Metaphysics, University of Nebraska (October 14, 2016)

#### Dark Laws and Brute Facts

Mississippi State Philosophy Colloquium (November 16, 2016)

## **Brute Facts About Emergence**

Department of Philosophy, University of Mississippi (November 18, 2016)

### Formal Reasoning as a Guide to Critical Thinking

Reasonfest, University of Kansas (April 14, 2017)

### Good to Know: Epistemic Virtues and Formal Methods for Critical Thinking

Humanities and Philosophy Conference, Houston Community College (November 3, 2017)

### Dark Laws: Epistemic Opacity and Trade-offs

Mellon-Sawyer Seminar, Boston University/Harvard (November 27, 2017)

### Formal Approaches to the Ontology and Epistemology of Resilience

Science of Security Lablet Kickoff, National Security Agency University of Maryland (March 13, 2018)

Compression and Irreversibility in Prediction

### Hintikka and Quine on Henkin Quantifiers (Plenary)

International Conference on Hintikka, Logic, and Philosophy, Beijing (August 22, 2018)

## Resilience and Emergence

Social Ontology Workshop, St Louis University (October 13, 2018)

Methodological School in Social and Human Sciences, Moldova State University (November 16, 2018 – By videoconference)

## Mechanistic Approaches to Physical Computation

Eastern Division Meeting, American Philosophical Association (January 9, 2019)

Resilience and the Limitations of Graph Theoretical Network Analysis

Department of Computer Science Colloquium, Kansas State University (February 1, 2019)

#### **Commentaries**

- [1] Response to Peter Swiggart 'Skepticism at Harvard: The Quinean Tradition. David Hall Memorial Lecture Series, University of Texas at El Paso (April 5, 2002)
- [2] Georgalis on Intentional Objects in psychological explanation. Southern Society for Philosophy of Psychology, New Orleans (April 9, 2004)
- [3] Polger on Multiple Realizability. APA Central Division Meeting, Chicago (April 29, 2005)
- [4] Cesarz on Leibniz, McTaggart and Broad' APA Eastern Division Meeting. New York (December 27, 2005)
- [5] Comments on J-P Vessel's "Defending a Possibilist Insight in Consequentialist Thought." New Mexico West Texas Philosophical Association, Las Cruces (April 7, 2006)
- [6] Comments on Bill Springer's "Aristotle on Substantial Change" Departmental Colloquium, University of Texas at El Paso (November 11, 2008)
- [7] Comments on Susanna Badiola's "Necessity and the apriori" New Mexico West Texas Philosophical Society, Abilene (March 26, 2010)
- [8] Comments on Pablo Zavala's "Ideally Necessary Laws" New Mexico West Texas Philosophical Society, El Paso (April 9, 2011)
- [9] Comments on Joeseph Ulatowski's "Taking Ordinary Intuitions Seriously" New Mexico West Texas Philosophical Society, El Paso (March 25, 2012)
- [10] Comments of Derek McAllister's "Did Gettier Give Us Justified True Belief? What Does Smith Really Believe?" APA Eastern Division Meeting, Atlanta (December 30, 2012)

[11] Comments on Andrew Higgins' "The Special Composition Question and the Question of Novel Existence." Kansas Philosophical Society Meeting, Kansas State Uni						

[14] 'PHIL 148: Improving DFW Rates and Learning Outcomes with a Hybrid Course'	CTE Celebration of Teaching,

Kamuran Osmanoglu, *Definitions of Race* 

Polo Camacho,

- Managed five successful tenure and/or promotion processes
- Redesigned our graduate and undergraduate curricula
- Created the first 4+1 MA program at the University of Kansas
- Dramatically improved our standing in Academic Analytics and reputational surveys
- Improved placement of PhD graduates
- Increased the number of undergraduate majors significantly

Axiomathes, Big Data and Society, Body and Society, British Journal for the Philosophy of Science, Erkenntnis, Human Organization, International Journal of Agents, Technology and Systems, International Journal of Forecasting, Mind, Minds and Machines, Philosophical Psychology, Philosophy and Technology, Philosophy of Science, PlosOne, Synthese,

## **Tenure and Promotion External Evaluators**

Marquette, Rutgers (Newark), Sienna College, Salve Regina College, New Mexico State

# Program Review:

UACH (Autonomous University of Chihuahua) Philosophy Department external review committee. Chihuahua City, Mexico. (2014)