

Dr. Michael H.G. Hoffmann

Associate Professor
Office: (404) 385 6083
Home: (404) 377 1186

homepage: <http://spp.gatech.edu/people/person/e285ac39-417c-5982-ba28-2777f85aaf7f>
http://works.bepress.com/michael_hoffmann/
E-mail: m.hoffmann@gatech.edu

Curriculum vitae

Table of Contents

Earned Degrees.....	2
Competence in classical languages.....	2
Employment.....	2
Publications.....	2
Books.....	2
Journal Articles, book chapters, argument maps.....	2
Project websites.....	9
Presentations.....	9
Invited Speaker.....	9
Conference presentations.....	11
Teaching.....	14
Goals.....	14
Graduate courses taught at Georgia Tech.....	14
Undergraduate courses taught at Georgia Tech, with Student evaluation.....	15
Dissertation Adviser.....	16
Individual student guidance.....	16
Membership in academic societies.....	17
Service.....	17
Professional Contributions.....	17
Editorial.....	17
Organizational.....	17
Advisory.....	18
Public and community service.....	18
Campus contributions.....	18
Board of Regents.....	18
Institute.....	19
College.....	19
School.....	19
Funded Projects.....	19
Awards.....	20

Earned Degrees

- Dr. phil. habil. Philosophie, Technische Hochschule Dresden, 2003
- Dr. Philosophie, Ludwig-Maximilians Universität, München, 1993
- M.A. Philosophie, Ludwig-Maximilians Universität, München, 1990. Nebenfächer: Evangelische Theologie (Altes Testament) und Politische Wissenschaften

Competence in classical languages

Greek, Hebrew, Latin

Employment

- Associate Professor for Philosophy, School of Public Policy, Georgia Institute of Technology, Atlanta, GA; Aug. 2004 – present
- Interim Chair (Geschäftsführender Direktor), School of Public Policy, Georgia Institute of Technology, Atlanta, GA; Aug. 2013 – July 2014
- Post-doc fellow, Faculty of Education, University of Victoria, BC, Canada; February–July 2004
- Wissenschaftler Mitarbeiter, Institut für Didaktik der Mathematik (IDM), Universität Bielefeld; June 2003 – Jan. 04
- Wissenschaftlicher Assistent (C1), IDM, Universität Bielefeld; May 1997–May 2003
- Wissenschaftler Mitarbeiter, IDM, Universität Bielefeld; Jan. 1994–June 1995; Oct. 1996–May 1997
- Wissenschaftler Mitarbeiter, Institut für Philosophie, Universität Essen; Jun. 1992–Dec. 1993
- Wissenschaftler Mitarbeiter, Forschungsinstitut für Friedenspolitik, Starnberg; 1983 – 1984

Publications

Books

- Hoffmann, M. H. G. (2005). *Erkenntnisentwicklung. Ein semiotisch-pragmatischer Ansatz*. Frankfurt am Main: Klostermann.
- Hoffmann, M. H. G., Lenhard, J., & Seeger, F. (Eds.). (2005). *Activity and Sign - Grounding Mathematics Education*. New York: Springer.
- Hoffmann, M. H. G. (Ed.). (2003). *Mathematik verstehen – Semiotische Perspektiven*. Hildesheim: Franzbecker.
- Hoffmann, M. H. G. (1996). *Die Entstehung von Ordnung. Zur Bestimmung von Sein, Erkennen und Handeln in der späteren Philosophie Platons*. Stuttgart und Leipzig: B.G. Teubner.

Journal Articles, book chapters, argument maps

- Hoffmann, M. H. G. (2016). Stimulating reflection and self-correcting reasoning through argument mapping: Three approaches. *Topoi. An International Review of Philosophy*. doi: 10.1007/s11245-016-9408-x
- Hoffmann, M. H. G. (2016). Collaborative and adversarial reframing: How to use argument mapping to cope with “wicked problems” and intractable conflicts. In D. Mohammed & M. Lewiński (Eds.), *Argumentation and Reasoned Action: Proceedings of the First European Conference on Argumentation, Lisbon, 9-12 June 2015* (Vol. 1, pp. 187-215). London: College Publications.
- Hoffmann, M. H. G. (2016). Commentary on Leite, Martins and Eçilmez’s Towards an Online Social Debating System. In D. Mohammed & M. Lewiński (Eds.), *Argumentation and Reasoned*

Action: *Proceedings of the First European Conference on Argumentation, Lisbon, 9-12 June 2015* (Vol. 1, pp. 399-401). London: College Publications.

- Eppler, M. J., Hoffmann, M. H. G., & Kernbach, S. (2015). Navicons for Collaboration - Navigating and Augmenting Discussions through Visual Annotations. *Information Visualisation (iV)*, 2015 19th International Conference on (pp. 386-391). Retrieved from http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=7272631&tag=1. doi: 10.1109/iV.2015.73.
- Hoffmann, M. H. G., & Lingle, J. (2015). Facilitating Problem-Based Learning by Means of Collaborative Argument Visualization Software. *Teaching Philosophy*, 38(4), 371-398. Retrieved from <https://www.pdcnet.org/teachphil/onlinefirst> (Dec 4, 2015) doi:10.5840/teachphil2015112039
- Hoffmann, M. H. G. (2015). Reflective Argumentation: A Cognitive Function of Arguing. *Argumentation*, 1-33. doi: 10.1007/s10503-015-9388-9
- Hoffmann, M. H. G. (2015). Argument Mapping Software: Semiotic Foundations. In M. Peters (Ed.), *Encyclopedia of Educational Philosophy and Theory* (pp. 1-6): Springer Singapore. Retrieved from http://dx.doi.org/10.1007/978-981-287-532-7_27-1.
- Hoffmann, M. H. G. (2015). Changing the Practice of Knowledge Creation through Collaborative Argument Mapping on the Internet. In B. Garsen, D. Godden, G. Mitchell & F. S. Henkemans (Eds.), *Proceedings of the 8th International Conference of the International Society for the Study of Argumentation* (pp. 578-589). Amsterdam, NL: Sic Sat.
- Hoffmann, M. H. G. (2015). Changing Philosophy through Technology: Complexity and Computer-Supported Collaborative Argument Mapping. *Philosophy & Technology*, 28(2), 167-188. doi: 10.1007/s13347-013-0143-6
- Hoffmann, M. H. G. (2015). Hume's argument that empirical knowledge cannot be certain, from the Enquires (argument map). Retrieved from http://works.bepress.com/michael_hoffmann/51/.
- Hoffmann, M. H. G. (2014). What is "Science"? For What Do We Need a "Polyocular Framework"? Open peer commentary on the article "Second-Order Science of Interdisciplinary Research: A Polyocular Framework for Wicked Problems" by Hugo F. Alrøe & Egon Noe. *Constructivist Foundations*, 10(1), 83-84.
- Hoffmann, M. H. G., & Borenstein, J. (2014). Understanding Ill-Structured Engineering Ethics Problems Through a Collaborative Learning and Argument Visualization Approach. *Science and Engineering Ethics*, 20(1), 261-276. doi: 10.1007/s11948-013-9430-y
- Hoffmann, M. H. G. (2014). Chapter 13. In F. Bellucci, A.-V. Pietarinen & F. Stjernfelt (Eds.), *Peirce. 5 Questions* (pp. 105-118). USA / UK: Automatic Press.
- Hoffmann, M. H. G. (2014). Argument map: Deductive argument visualization stimulates reflection on implicit background assumptions. Retrieved from http://works.bepress.com/michael_hoffmann/46
- Hoffmann, M. H. G. (2014). Argument map: Developing scientific hypotheses and experimental designs in form of an argumentation. Loewi's crucial experiment on chemical neurotransmission. Retrieved from http://works.bepress.com/michael_hoffmann/49
- Hoffmann, M. H. G. (2014). Argument map: Loewi's argument that neuro-transmission works with chemical signals instead of electrical (short version). Retrieved from http://works.bepress.com/michael_hoffmann/50
- Hoffmann, M. H. G. (2014). Hypothesis generation and testing: A template for biomedical research (argument map). Retrieved from http://works.bepress.com/michael_hoffmann/48
- Hoffmann, M. H. G. (2014). Sparrow's 2012 argument that robotic weapons are disastrous for peace (argument map). Online: http://works.bepress.com/michael_hoffmann/43
- Hoffmann, M. H. G. (2014). Ron Arkin's 2013 argument for a moratorium on deployment, but no ban of lethal autonomous robots (argument map). Online: http://works.bepress.com/michael_hoffmann/42
- Hoffmann, M. H. G. (2014). Heyns's 2013 argument that all states should declare moratoria on lethal autonomous robots (argument map). Online: http://works.bepress.com/michael_hoffmann/45

- Hoffmann, M. H. G. (2014). Heyns's 2013 argument in the Guardian that lethal autonomous robots (LARs) should be banned (argument map). Online: http://works.bepress.com/michael_hoffmann/44
- Hoffmann, M. H. G., Schmidt, J. C., & Nersessian, N. (2013). Philosophy of and as Interdisciplinarity (Editor introduction to a special issue). *Synthese*, 190(11), 1857-1864. doi: DOI 10.1007/s11229-012-0214-8
- Hoffmann, M. H. G. (2013). Why the presentation of arguments in logical form has advantages. Argument map. Online: http://works.bepress.com/michael_hoffmann/40
- Hoffmann, M. H. G. (2013). Collaborative, problem-based learning with the argument-visualization software "AGORA-net". In A. L. Sellami (Ed.), 4th International Conference on Argumentation, Rhetoric, Debate, and the Pedagogy of Empowerment (pp. 179-197). Doha, Qatar: QatarDebate Center. Online: http://www.qatardebate.org/international-events/fouth-icard2013/conference_proceedings.
- Hoffmann, M. H. G. (2013). Cognição e Pensamento Diagramático. In J. Queiroz & L. d. Moraes (Eds.), *A Lógica de Diagramas de Charles Sanders Peirce: Implicações em Ciência Cognitiva, Lógica e Semiótica* (pp. 105-137). Juiz de Fora: Editora da Universidade Federal de Juiz de Fora.
- Hoffmann, M. H. G. (2011). Understanding Controversies and Ill-Structured Problems Through Argument Visualization. Curriculum and Learning Materials for Problem-based Learning in Small Groups of Students Who Work Autonomously on Projects with the Interactive AGORA Software, Including an Exemplary Reader on Genetically Modified Plants. Online: http://works.bepress.com/michael_hoffmann/38
- Hoffmann, M. H. G. (2011). "Theoric Transformations" and a New Classification of Abductive Inferences. *Transactions of the Charles S Peirce Society*, 46(4), 570-590.
- Hoffmann, M. H. G. (2011). Powerful Arguments: Logical Argument Mapping. In F. H. v. Eemeren, B. Garssen, D. Godden & G. Mitchell (Eds.), *Proceedings of the 7th ISSA Conference, International Society for the Study of Argumentation*. Amsterdam, NL: CD-ROM.
- Hoffmann, M. H. G. (2011). Cognitive Effects of Argument Visualization Tools. In F. Zenker (Ed.), *Argumentation: Cognition and Community. Proceedings of the 9th International Conference of the Ontario Society for the Study of Argumentation (OSSA), May 18-21, 2011*, 1-12. Online: <http://scholar.uwindsor.ca/ossaarchive/OSSA9/papersandcommentaries/24/>
- Hoffmann, M. H. G., Curry, J., & Pu, C. (2011). EarthAgora: A collaborative knowledge management tool. White Paper describing a possible EarthCube design. Online: http://api.ning.com/files/2RKRY-*0kC95226Yt2gAyYVbdPy9PRomy2k26hOdXHIQqb0YuspoD6Upi0JWAFKGwCK1aCbis2jUD7Z39y*IsQ8yyicT1eo1/EarthAgora_GeorgiaTech.pdf
- Hoffmann, M. H. G. (2011). Cognitive conditions of diagrammatic reasoning. *Semiotica*, 186 (1/4), 189-212.
- Hoffmann, M. H. G. (2011). Climate Ethics: Structuring Deliberation by means of Logical Argument Mapping. *Journal of Speculative Philosophy*, 25 (1), 64-97.
- Hoffmann, M. H. G., & Schmidt, J. C. (2011). Philosophy of (and as) Interdisciplinarity. Workshop Report (Atlanta, 28-29 September 2009). *Journal for General Philosophy of Science*, 42(1), 169-175. doi: 10.1007/s10838-011-9150-4
- Hoffmann, M. H. G. (2011). Analyzing Framing Processes in Conflicts and Communication by Means of Logical Argument Mapping. In W. A. Donohue, R. G. Rogan & S. Kaufman (Eds.), *Framing Matters: Perspectives on Negotiation Research and Practice in Communication* (pp. 136-164). New York, NY: Peter Lang.
- Hoffmann, M. H. G., Nersessian, N., Schmidt, J. C., Decker, M., & Hirsch, P. (2010). Interdisciplinary Collaboration: Cognitive Conditions and Tools. *White Paper for NSF's SBE 2020: Future Research in the Social, Behavioral & Economic Sciences*. Online: http://www.nsf.gov/sbe/sbe_2020/submission_detail.cfm?upld_id=244
- Hoffmann, M. H. G., & Roth, W.-M. (2010). Four Functions of Signs in Learning and Interdisciplinary Collaboration. In I. Semetsky (Ed.), *Semiotics - Education - Experience* (pp. 131-150).

Rotterdam, NL: Sense Publishers.

- Roth, W.-M., & Hoffmann, M. H. G. (2010). Signs in/of Communication. In I. Semetsky (Ed.), *Semiotics - Education - Experience* (pp. 151-174). Rotterdam, NL: Sense Publishers.
- Hoffmann, M. H. G. (2010). Possibilities, limits, and conditions of a "philosophy in the field." . *Second International Workshop on the Philosophy of/as Interdisciplinarity, Neversdorf/Hamburg, Sept 18 - 21, 2010*. Online: http://www.pin-net.gatech.edu/presentations/Hoffmann_PIN-2010.pdf
- Hoffmann, M. H. G. (2010). LAM map of Nagel's core argument in "The Problem of Global Justice" (2005). Argument Map. Online: http://works.bepress.com/michael_hoffmann/32
- Hoffmann, M. H. G. (2010). Diagrams as Scaffolds for Creativity. *AAAI Workshops, North America*. Online: <http://aaai.org/ocs/index.php/WS/AAAIW10/paper/view/2027>
- Hoffmann, M. H. G. (2010). The Debate about the Stern-Review and the Economics of Climate Change. Argument Map. Online: <http://hdl.handle.net/1853/46190>
- Hoffmann, M. H. G. (2010). Xu Huiying, "Humankind Takes up Environmental Ethics," *Chinese Education & Society*, 37, 4 (2004): 16-23. Argument Map. Online: <http://tinyurl.com/pw5f7g>.
- Hoffmann, M. H. G. (2009). Visualizing Ethical Controversies and Positions by Logical Argument Mapping (LAM) – A Manual. *Georgia Tech's School of Public Policy Working Paper Series*, 50, online: <http://www.spp.gatech.edu/faculty/workingpapers/wp50.pdf>.
- Hoffmann, M. H. G. (2009). Über die Bedingungen der Möglichkeit durch diagrammatisches Denken etwas zu lernen: Diagrammgebrauch in Logik und Arithmetik. *Zeitschrift für Semiotik*, 31(3-4), 241-274.
- Hoffmann, M. H. G. (2009). Argument Visualization in the Political Arena: The Debate on Global Climate Engineering. Argument Map. Online: http://works.bepress.com/michael_hoffmann/2 (also at <http://tinyurl.com/65c2os>).
- Hoffmann, M. H. G. (2008). Structure of Aristotle's Nicomachean Ethics, Books 1 and 2. Online: <http://tinyurl.com/397tw69>
- Hoffmann, M. H. G. (2008). Requirements for reflective argument visualization tools: a case for using validity as a normative standard. In P. Besnard, S. Doutre & A. Hunter (Eds.), *Computational Models of Argument. Proceedings of COMMA 2008* (pp. 196-203). Amsterdam: IOS.
- Hoffmann, M. H. G. (2008). Reflective Argumentation. *Georgia Tech's School of Public Policy Working Paper Series*, 44, online: <http://www.spp.gatech.edu/faculty/workingpapers/wp44.pdf>.
- Hoffmann, M. H. G. (2008). Analyzing Framing Processes by Means of Logical Argument Mapping. *Intl. Association for Conflict Management, IACM 20TH Annual Conference Paper, Available at SSRN: http://ssrn.com/abstract=1298520*.
- Hoffmann, M. H. G. (2007). Seeing Problems, Seeing Solutions. Abduction and Diagrammatic Reasoning in a Theory of Scientific Discovery. In O. Pombo & A. Gerner (Eds.), *Abduction and the Process of Scientific Discovery* (pp. 213-236). Lisboa: CFCUL/Publidisa.
- Hoffmann, M. H. G. (2007). Searching for common ground on Hamas through Logical Argument Mapping. In H. V. Hansen, C. W. Tindale, J. A. Blair, R. H. Johnson & D. M. Godden (Eds.), *Dissensus and the search for common ground*, 1-26. Online: <http://scholar.uwindsor.ca/ossaarchive/OSSA7/papersandcommentaries/69/>
- Hoffmann, M. H. G. (2007). Power and Limits of Dynamical Systems Theory in Conflict Analysis. *IACM 2007 Meetings Paper*, available at SSRN: <http://ssrn.com/abstract=1087364>.
- Hoffmann, M. H. G. (2007). Learning without belief-change? *Cultural Studies of Science Education*, 2(3), 688-694. doi: 10.1007/s11422-007-9064-y.
- Hoffmann, M. H. G. (2007). Learning from people, things, and signs. *Studies in Philosophy and Education*, 26(3), 185-204.
- Hoffmann, M. H. G. (2007). Logical Argument Mapping: A cognitive-change-based method for building common ground. In S. Buckingham Shum, M. Lind & H. Weigand (Eds.), *ICPW '07 2nd international conference on Pragmatic webACM International Conference Proceeding Series* (Vol. 280, pp. 41-47). Tilbourg, NL. Retrieved from <http://dl.acm.org/citation.cfm?doid=1324237.1324242>. doi: <http://doi.acm.org/10.1145/1324237.1324242>.

- Hoffmann, M. H. G., & Roth, W.-M. (2007). The complementarity of a representational and an epistemological function of signs in scientific activity. *Semiotica*, 164(1/4), 101-121.
- Hoffmann, M. H. G. (2006). What is a “semiotic perspective,” and what could it be? Some comments on the contributions of this Special Issue. *Educational Studies in Mathematics*, 61, 279–291.
- Hoffmann, M. H. G. (2006). Logical argument mapping: A method for overcoming cognitive problems of conflict management. *Georgia Tech's School of Public Policy Working Paper Series*, 6, online: <http://www.spp.gatech.edu/faculty/workingpapers/wp6.pdf>.
- Hoffmann, M. H. G. (2006). How to change your mind—even if you do not plan to do it... *SIGNAL. Newsletter of the International Association for Conflict Management*, 22(1), pp.21, 23. Online: <http://www.iacm-conflict.org/SIGNAL/SIGNAL-v21-2.pdf>
- Hoffmann, M. H. G. (2006). Framing: An Epistemological Analysis. *IACM 2006 Meetings Paper*, Available at SSRN: <http://ssrn.com/abstract=916007>.
- Hoffmann, M. H. G. (2006). Exploring epistemological approaches to argumentation: From evaluation standards to the practice of argumentation. *Georgia Tech's School of Public Policy Working Paper Series*, 8, online: <http://www.spp.gatech.edu/faculty/workingpapers/wp8.pdf>.
- Hoffmann, M. H. G. (2006). Einleitung: Semiotik in der Mathematikdidaktik. Lernen anhand von Zeichen und Repräsentationen. *Journal für Mathematik-Didaktik*, 27(3/4), 171-179.
- Hoffmann, M. H. G. (2006). Axiomatisierung zwischen Platon und Aristoteles. In G. Schiemann, D. Mersch & G. Böhme (Eds.), *Platon im nachmetaphysischen Zeitalter* (Vol. (enlarged version of the article published in Zeitschrift für philosophische Forschung in 2004), pp. 111-135). Frankfurt am Main: Wissenschaftliche Buchgesellschaft.
- Hoffmann, M. H. G. (2005). Problems of Understanding in Conflicts and a Semiotic Solution. *Social Sciences Research Network. SSRN eLibrary*, <http://ssrn.com/abstract=758345>, IACM 18th Annual Conference.
- Hoffmann, M. H. G. (2005). Logical argument mapping: A method for overcoming cognitive problems of conflict management. *International Journal of Conflict Management*, 16(4), 304-334.
- Hoffmann, M. H. G. (2005). Limits of truth: Exploring epistemological approaches to argumentation. *Informal Logic*, 25(3), 245-260.
- Hoffmann, M. H. G., & Roth, W.-M. (2005). What you should know to survive in knowledge societies. On a semiotic understanding of 'knowledge'. *Semiotica*, 157(1/4), 105-142.
- Hoffmann, M. H. G. (2005). The curse of the Hegelian heritage: “Dialectic,” “contradiction,” and “dialectical logic” in Activity Theory. *Georgia Tech's School of Public Policy Working Paper Series*, 9, online: <http://www.spp.gatech.edu/faculty/workingpapers/wp9.pdf>.
- Bakker, A., & Hoffmann, M. H. G. (2005). Diagrammatic Reasoning as the Basis for Developing Concepts: A Semiotic Analysis of Students' Learning about Statistical Distribution. *Educational Studies in Mathematics*, 60(3), 333–358.
- Hoffmann, M. H. G., Lenhard, J., & Seeger, F. (2005). Grounding mathematics education. Michael Otte's contribution. In M. H. G. Hoffmann, J. Lenhard & F. Seeger (Eds.), *Activity and Sign - Grounding Mathematics Education* (pp. 1-7). New York: Springer.
- Hoffmann, M. H. G. (2005). Signs as Means for Discoveries. Peirce and His Concepts of 'Diagrammatic Reasoning,' 'Theorematic Deduction,' 'Hypostatic Abstraction,' and 'Theoric Transformation'. In M. H. G. Hoffmann, J. Lenhard & F. Seeger (Eds.), *Activity and Sign – Grounding Mathematics Education* (pp. 45-56). New York: Springer.
- Hoffmann, M. H. G. (2005). Charles Peirce: Formen kreativer Tätigkeit in der Mathematik. In G. Abel (Ed.), *Kreativität. Sektionsbeiträge des XX. Deutschen Kongresses für Philosophie, Berlin September 2005* (Vol. 1, pp. 423-433). Berlin: Universitätsverlag der TU Berlin.
- Hoffmann, M. H. G. (2004). Zur Einheit mathematischen Wissens. Von Platon zu Gödel. In J.-M. Narbonne & A. Reckermann (Eds.), *Pensées de l' "Un" dans l'histoire de la philosophie. Études en hommage au professeur Werner Beierwaltes* (pp. 550-571). Paris / Québec: Vrin / Les Presses de l'Université Laval.
- Hoffmann, M. H. G. (2004). Peirces Philosophie der Wissenschaft, Logik und Erkenntnistheorie. Neuere Publikationen und Editionen. 2. Teil. *Philosophische Rundschau*, 51(4), 296-313.

- Hoffmann, M. H. G. (2004). Peirces Philosophie der Wissenschaft, Logik und Erkenntnistheorie. Neuere Publikationen und Editionen. 1. Teil. *Philosophische Rundschau*, 51(3), 193-212.
- Hoffmann, M. H. G. (2004). How to Get It. Diagrammatic Reasoning as a Tool of Knowledge Development and its Pragmatic Dimension. *Foundations of Science*, 9(3), 285-305.
- Hoffmann, M. H. G., & Roth, W.-M. (2004). Learning by Developing Knowledge Networks. A semiotic approach within a dialectical framework. *ZDM. Zentralblatt für Didaktik der Mathematik*, 36 (6), 196-205.
- Hoffmann, M. H. G. (2004). Axiomatisierung zwischen Platon und Aristoteles. *Zeitschrift für philosophische Forschung*, 58 (2), 224-245.
- Hoffmann, M. H. G. (2003). Was ist Mathematik? Eine Unterscheidung mathematischer Tätigkeiten (work in progress). Online: <http://www.uni-bielefeld.de/idm/personen/mhoffman/Was-ist-Mathematik.html>
- Hoffmann, M. H. G. (2003). Semiotik als Analyse-Instrument. In M. H. G. Hoffmann (Ed.), *Mathematik verstehen – Semiotische Perspektiven* (pp. 34-77). Hildesheim: Franzbecker.
- Hoffmann, M. H. G. (2003). Peirce's "Diagrammatic Reasoning" as a Solution of the Learning Paradox. In G. Debrock (Ed.), *Process Pragmatism: Essays on a Quiet Philosophical Revolution* (pp. 121-143). Amsterdam: Rodopi.
- Hoffmann, M. H. G. (2003). Lernende lernen abduktiv: eine Methodologie kreativen Denkens. In H.-G. Ziebertz, S. Heil & A. Prokopf (Eds.), *Abduktive Korrelation. Religionspädagogische Konzeption, Methodologie und Professionalität im interdisziplinären Dialog* (pp. 125-136 (eine revidierte und wesentlich erweiterte Fassung online: <http://www.uni-bielefeld.de/idm/personen/mhoffman/papers/103-MH-abduktiv-Lernen.pdf>)). Münster: LIT Verlag.
- Hoffmann, M. H. G. (2003). „Entdeckendes Lernen“ – semiotisch gefasst. In H.-W. Henn (Ed.), *Beiträge zum Mathematikunterricht. Vorträge auf der 37. Tagung für Didaktik der Mathematik vom 3. bis 7. März 2003 in Dortmund* (pp. 305-308). Hildesheim: Franzbecker.
- Hoffmann, M. H. G. (2003). Einleitung: Warum Semiotik? In M. H. G. Hoffmann (Ed.), *Mathematik verstehen – Semiotische Perspektiven* (pp. 1-18). Hildesheim: Franzbecker.
- Hoffmann, M. H. G., & Seeger, F. (2003). *Science Education across Europe (SEE!). A Project on Generalisation in Science: Overcoming the Split between the Two Cultures. A proposal for the European Science Education Initiative (FP6-2003-Science and Society-5)*. Occasional Paper 187, October 2003: Arbeiten aus dem Institut für Didaktik der Mathematik der Universität Bielefeld, 42 S. (Download: <http://www.uni-bielefeld.de/idm/serv/dokubib/occ187.pdf>).
- Hoffmann, M. H. G. (2002). Das Problem der Erkenntnisentwicklung und Peirces semiotisch-pragmatischer Lösungsansatz. *Allgemeine Zeitschrift für Philosophie*, 27(3), 223-240.
- Hoffmann, M. H. G. (2001). Was sind "Symbole", und wie läßt sich ihre Bedeutung erfassen? In G. Melville (Ed.), *Institutionalität und Symbolisierung. Verstetigungen kultureller Ordnungsmuster in Vergangenheit und Gegenwart* (pp. 95–117). Köln Böhlau.
- Hoffmann, M. H. G. (2001). Skizze einer semiotischen Theorie des Lernens. *Journal für Mathematik-Didaktik*, 22(3/4), 231-251.
- Hoffmann, M. H. G. (2001). Peirces Zeichenbegriff: seine Funktionen, seine phänomenologische Grundlegung und seine Differenzierung. Online: http://www.uni-bielefeld.de/idm/semiotik/Hoffmann-Peirces_Zeichen.pdf
- Hoffmann, M. H. G. (2001). Geist und Welt - durch die Symbolisierungen der Kunst betrachtet. Rezension von: Rolf Lachmann, Susanne K. Langer. Die lebendige Form menschlichen Fühlens und Verstehens. München 2000: Fink. *IASL online*, <http://iasl.uni-muenchen.de/rezensio/liste/hoffmann.html>.
- Hoffmann, M. H. G. (2001). Die synthetisch-pragmatische Mathematikauffassung im Gegensatz zur analytischen – ein Blick auf die Geschichte der Philosophie der Mathematik. In K. Lengnink, S. Prediger & F. Siebel (Eds.), *Mathematik und Mensch. Sichtweisen der Allgemeinen Mathematik* (pp. 127-140). Mühlthal: Verlag Allgemeine Wissenschaft.
- Hoffmann, M. H. G. (2001). The 1903 Classification of Triadic Sign-Relations. *Digital Encyclopedia of*

- Charles S. Peirce. Online: <http://www.digitalpeirce.fee.unicamp.br/hoffmann/p-sighof.htm>
- Hoffmann, M. H. G. (2000). Semiotik in der Mathematikdidaktik. Zu einer möglichen Bündelung von Forschungsinteressen innerhalb der GDM. In M. Neubrand (Ed.), *Beiträge zum Mathematikunterricht. Vorträge auf der 34. Tagung für Didaktik der Mathematik vom 28. Februar bis 3. März 2000 in Potsdam* (pp. 298–301). Hildesheim: Franzbecker.
- Hoffmann, M. H. G. (2000). The Role of "Intuition" in Knowledge Development. In A. Aliseda & D. Pearce (Eds.), *14th European Conference on Artificial Intelligence. ECAI Workshop Notes: Scientific Reasoning in AI and Philosophy of Science* (pp. 34–39). Berlin.
- Hoffmann, M. H. G. (2000). Is there a 'Logic' of Abduction? In A. Gimete-Welsh (Ed.), *Ensayos Semióticos. Dominios, modelos y miradas desde el cruce de la naturaleza y la cultura (= Selected papers - 6th Congress of the International Association for Semiotic Studies, Guadalajara 1997)* (pp. 617–628 Online: <http://www.uni-bielefeld.de/idm/personen/mhoffman/papers/abduction-logic.html>). Mexico City: Grupo Editorial Miguel Angel Porrúa / Editorial Universidad Autónoma de Puebla / Asociación Mexicana de Estudios Semióticos (ISBN 970-701-088-6).
- Hoffmann, M. H. G. (2000). Einleitung. Lernen als Zeichenprozess (Themenheft). *Zeitschrift für Semiotik*, 22(1), 3–10.
- Hoffmann, M. H. G. (2000). Die Paradoxie des Lernens und ein semiotischer Ansatz zu ihrer Auflösung. *Zeitschrift für Semiotik*, 22(1), 31–50.
- Hoffmann, M. H. G., & Plöger, M. (2000). Mathematik als Prozess der Verallgemeinerung von Zeichen: Eine exemplarische Unterrichtseinheit zur Entdeckung der Inkommensurabilität. *Zeitschrift für Semiotik*, 22(1), 81–114.
- Hoffmann, M. H. G., & Seeger, F. (2000). Semiotik in der Mathematikdidaktik. Ein Instrument für eine Didaktik des 21. Jahrhunderts. Online: http://www.uni-bielefeld.de/idm/semiotik/Positionspapier_AG-Semiotik.html
- Hoffmann, M. H. G. (1999). Zur Rolle von Modellen und Metaphern bei der Entwicklung neuer Theorien. In J. Mittelstraß (Ed.), *Die Zukunft des Wissens. XVIII. Deutscher Kongreß für Philosophie Konstanz 1999, Workshop-Beiträge* (pp. 793–801). Konstanz: UVK Universitätsverlag Konstanz.
- Hoffmann, M. H. G. (1999). Problems with Peirce's Concept of Abduction. *Foundations of Science*, 4(3), 271–305.
- Hoffmann, M. H. G. (1998). Verzicht auf Wahrheit, Existenz von Tatsachen und die Frage nach der "Radikalität" der "Radikal-Konstruktivistischen Wissenstheorie". *Ethik und Sozialwissenschaften*, 9 (4), 533–535.
- Hoffmann, M. H. G. (1998). ¿Hay una "Lógica" de la Abducción? *Analogía Filosófica (Mexico)*, 12(1), 41–55 (online: <http://www.unav.es/gep/AN/Hoffmann.html>).
- Hoffmann, M. H. G. (1998). Erkenntnistheoretische Grundlagen des Lernens: Lernen als Verallgemeinerung. *Beiträge zum Mathematikunterricht. Vorträge auf der 32. Tagung für Didaktik der Mathematik vom 2.-6. März 1998 in München (online version substantially enlarged)*. Ed. Michael Neubrand, 311-314. Online: http://works.bepress.com/michael_hoffmann/33
- Otte, M., Mies, T., & Hoffmann, M. H. G. (1997). *Die Symmetrie von Subjektbezug und Objektivität wissenschaftlicher Verallgemeinerung. Untersuchungen zur Begründung wissenschaftlicher Rationalität im Anschluß an die mathematische Philosophie von Charles S. Peirce*. Occasional Paper 162, Februar 1997: Arbeiten aus dem Institut für Didaktik der Mathematik der Universität Bielefeld, 62 S. Download: <http://www.uni-bielefeld.de/idm/serv/dokubib/occ162.pdf>.
- von Perger, M., & Hoffmann, M. H. G. (1997). Ideen, Wissen und Wahrheit nach Platon. Neuere Monographien. *Philosophische Rundschau*, 44, 113–151.
- Hoffmann, M. H. G. (1996). Eine semiotische Modellierung von Verallgemeinerungsprozessen. In C. Hubig & H. Poser (Eds.), *Cognitio humana - Dynamik des Wissens und der Werte. XVII. Deutscher Kongreß für Philosophie Leipzig 1996, Workshop-Beiträge* (Vol. 1, pp. 560–567).
- Hoffmann, M. H. G. (1996). *Eine semiotische Modellierung von Lernprozessen. Peirce und das*

- Wechselverhältnis von Abduktion und Vergegenständlichung*. Occasional Paper 160, November 1996: Arbeiten aus dem Institut für Didaktik der Mathematik der Universität Bielefeld, 51 S. (Online: <http://www.uni-bielefeld.de/idm/serv/dokubib/occ160.pdf>).
- Otte, M., & Hoffmann, M. H. G. (1996). Warum ist Mathematik allgemeinbildend? *Mitteilungen der Gesellschaft für Didaktik der Mathematik*, 62, 35–39.
- Hoffmann, M. H. G., & Perger, M. v. (1996). Neues zu Platons „ungeschriebenen Lehren". *Philosophische Rundschau*, 43, 97–132.
- Hoffmann, M. H. G. (1996). Das Problem der Zukunft im Rahmen holistischer Ethiken. Im Ausgang von Platon und Peirce. In H. W. Ingensiep & R. Hoppe-Sailer (Eds.), *NaturStücke. Zur Kulturgeschichte der Natur* (pp. 17–41). Ostfildern: edition tertium.
- Otte, M., & Hoffmann, M. H. G. (1994). Die Philosophie der Mathematik bei Charles S. Peirce im Kontext seines "evolutionären Realismus". Eine Untersuchung zum Peirceschen Kontinuitätsprinzip (Forschungsbericht). *DIALEKTIK. Enzyklopädische Zeitschrift für Philosophie und Wissenschaften*, 1994, Heft 3, 181–186.
- Otte, M., Hoffmann, M. H. G., & Wolff, M. (1994). *Die Philosophie der Mathematik bei Charles S. Peirce im Kontext seines "evolutionären Realismus". Zum Peirceschen Kontinuitätsprinzip (überarbeiteter DFG-Projektantrag)*. Occasional Paper 155, Juli 1994: Arbeiten aus dem Institut für Didaktik der Mathematik der Universität Bielefeld, 57 S. Download: <http://www.uni-bielefeld.de/idm/serv/dokubib/occ155.pdf>.
- Hoffmann, M. H. G. (1994). Jona oder die Kunst, unrecht haben zu können. Überlegungen zur hermeneutischen Praxis. *LESARTEN. Zeitschrift für Interpretation*, 2, 83–120.
- Hoffmann, M. H. G. (1993). The "Realization of the Due-Measure" as Structural Principle in Plato's *Statesman*. *POLIS. Newsletter of the Society for the Study of Greek Political Thought*, 12, Nos 1 & 2, 77–98.
- Hoffmann, M. H. G. (1988). Rezension zu: Hans Jonas, *Das Prinzip Verantwortung. Versuch einer Ethik für die technologische Zivilisation*, Frankfurt a.M. 1984. *Zeitschrift für Politik*, 35, 302–303.

Project websites

- AGORA: Participate – Deliberate! <http://agora.gatech.edu>
- Philosophy of /as Interdisciplinarity Network: <http://pin-net.gatech.edu/>
- Logical argument mapping (LAM): <http://lam.spp.gatech.edu>

Presentations

Invited Speaker

- Philosophy of Technology*. Science, Technology, and Society: STS Core Seminar (HTS6743 / LMC6743 / PUBP6743). Georgia Institute of Technology, September 29, 2015.
- Argument mapping with AGORA-net*: ICLAST: Technology to Broaden Education, Ivan Allen College of the Liberal Arts, Georgia Institute of Technology, August 28, 2015
- Peirce's diagrammatic reasoning as a foundation for computer-supported reflective argumentation*. The Lisbon Centennial Peirce Workshop: The Actuality of Peirce's Thought II. June 9, 2015, Centro de Filosofia das Ciências da Universidade de Lisboa, Portugal.
- Tutorial: Collaborative argument mapping in AGORA-net*. The 2015 International Conference on Collaboration Technologies and Systems (CTS 2015), June 01 - 05, 2015, Atlanta
- Navigating Conversations Visually* (with Martin Eppler). Cognitive Systems Workshop, March 3, 2015, Georgia Institute of Technology
- Against the verbal-visual divide: Peirce's concept of diagrammatic reasoning and the representational, epistemic, and cognitive function of argument visualization systems*. Diagramming Evidence: Visualizing Connections in Science and the Humanities, Centre for Reasoning, Argumentation

and Rhetoric (CRRAR) at the University of Windsor, April 25-26, 2014.

<http://cfl.uwindsor.ca/crrar/diagramming-evidence-visualizing-connections-in-science-and-humanities>.

Designing argument visualization software as cognitive tools. 10th eColloq on Argumentation, Feb. 24, 2014: <http://ecolloq.wordpress.com/>.

To exist or not to exist. Between John Rawls's Principles of Justice and Zygmund Bauman's "Wasted lives." English Avenue Community Think Tank, Atlanta, November 23, 2013.

Understanding Social Inequality and the Implications of Science and Technology in the English Avenue Neighborhood as Part of the New STS Curriculum. HTS Speaker Series (School of History, Technology, and Society, Georgia Tech), November 4, 2013.

What exactly does it mean to address "real-world problems"? International Conference 2012 of the Philosophy of / as Interdisciplinarity Network in Tübingen, Germany, September 21-23.

Learning through struggling with diagrams. International Conference on "Mind in Motion and the Body of the Sign. Peirce's Semiotical Pragmatism," Humboldt-Universität zu Berlin, March 15–17, 2012.

Wie die kognitive Power externer Repräsentationen in virtuellen Lernwelten genutzt werden kann. 13. Internationaler Kongress der Deutschen Gesellschaft für Semiotik (DGS), Universität Potsdam, 12. bis 16. October 2011.

AGORA: Applying Logic to Structure Collaboration. Russian Academy of Science, Moscow, June 3rd, 2011.

Engineering Ethics Education: Understanding Ill-structured Problems and Conflicting Needs, Interests and Values Through Argument Visualization. Keynote given at the International Seminar on "Modernization of Educational Process in the Area of Engineering Using Innovative Methods and Technologies." Bauman Moscow State Technical University, Moscow, June 1st, 2011.

Panel on "The Future of Philosophy," together with Robert Frodeman, Steve Fuller, Nancy Tuana, and Paul Thompson. At the conference "A New Practice of Philosophy. Taking Philosophy beyond Disciplinary Bounds." Third International Conference on the Philosophy of/as Interdisciplinarity, University of North Texas, March 7 – 9, 2011.

(co-author: Jason Borenstein (2010). *AGORA: a New Interactive and Web-based Learning Tool for Engineering Ethics*. Keynote presented at the International Seminar on "Development and Modernization of Educational Programs & Technologies," Bauman Moscow State Technical University, Moscow, Nov 17, 2010.

Possibilities, limits, and conditions of a "philosophy in the field." Second International Workshop on the Philosophy of/as Interdisciplinarity, Neversdorf/Hamburg, Sept 18 – 21, 2010.

Abduction and diagrammatic reasoning in a semiotic theory of scientific creativity. Center for Semiotics, Aarhus University, Aarhus, Denmark, November 5, 2009.

Images of world views. Revealing the inferential structure of belief systems through diagrammatic reasoning. Public lecture at the Universidade de Lisboa, Portugal, organized by the "Lisbon Centre of the Image between science and art (LCISA)," June 2, 2008.

Using the forces of diagrammatic rationality in Logical Argument Mapping. Two days seminar at the "Lisbon Centre of the Image between science and art (LCISA)," June 3-4, 2008.

Logical Argument Mapping: A method to analyze texts, narratives, and argumentations. Exemplified through two perspectives on how to deal with the Palestinian Hamas. Doctoral School of Organisational Learning, Learning Lab Denmark, University of Copenhagen, October 26, 2007.

Abduction and diagrammatic reasoning in a semiotic-pragmatic theory of learning. University of Copenhagen, October 25, 2007.

The quadriadic structure of shared intentionality and communication. A semiotic model of cognitive systems. Cognitive Science Brown Bag, Georgia Tech, September 15, 2006.

Seeing problems, seeing solutions. Abduction and diagrammatic reasoning in a semiotic theory of learning and scientific discovery. Paper presented at the International Meeting: Abduction and the Process of Scientific Discovery, Center of the Philosophy of Sciences, University of

Lisbon 4th to 6th of May 2006.

Cognitive and semiotic conditions of abductive creativity. Paper presented at the Philosophy of Science Seminar, Universidade de Lisboa, Faculdade da Ciencia, 8. May 2006.

Diagrammatic Reasoning. University of North Carolina at Charlotte, Mathematics Department, March 31, 2006.

Model-Based Reasoning: A Tool for Overcoming Epistemological Problems of Conflict Management. Georgia Tech, Ivan Allan College, Science and Technology Seminar, 25. Februar 2005.

A model theoretic interpretation of Plato's Idea of the Good. Georgia Tech Philosophy Society, 11. November 2004.

Platons Axiomatisierung der math mata. May 23-24, 2002, Colloquium at the 65. birthday of Prof. Dr. Gernot B hme, Darmstadt.

Was taugt Abduktion zur L sung des Korrelationsproblems der Religionsp dagogik? December 5-7, 2001, expert meeting „Abduktive Korrelation. Ein Neuansatz religi ser Bildung in der modernen Gesellschaft“ at Katholisch-Theologische Fakult t der Universit t W rzburg (Prof. Dr. H.-G. Ziebertz).

Zur Einheit mathematischen Wissens. Von Platon zu G del. May 10-11, 2001, Colloquium at the 70. birthday of Prof. Dr. Werner Beierwaltes, M nchen.

Grundlagen einer semiotischen Theorie des Lernens. December 4, 2000, Institut f r Mathematik, Abteilung f r Didaktik der Mathematik, Universit t Klagenfurt, Austria.

Mathematik als Prozess der Verallgemeinerung von Zeichen. June 29, 2000, at Mathematikdidaktisches Kolloquium des Instituts f r Entwicklung und Erforschung des Mathematikunterrichts (IEEM) der Universit t Dortmund.

Die Peircesche Semiotik als Theorieansatz der Mathematikdidaktik. May 28.-30, 1999, at the weekend workshop „Mathematikdidaktische Theorieans tze“ in Wermelskirchen-Dabringhausen near Cologne.

Peirce and the Possibility of Scientific Progress: „Diagrammatic Reasoning“ as a Solution of the Internalism-Externalism-Dilemma. International Colloquium, May 19-21, 1999, Nijmegen University, The Netherlands: The Challenge of Pragmatic Process Philosophy.

Zur Bedeutung von Symbolen nach Peirce. Colloquium „Symbole und Handeln – wie Zeichen praktisch werden“. October, 10, 1997, TU Dresden, DFG-Sonderforschungsbereich 537 „Institutionalit t und Geschichtlichkeit“.

Conference presentations

Using Reflection Tools for Decision Making and Negotiation on Wicked Problems. Paper presented at the 29th Annual Conference of the International Association for Conflict Management (IACM), June 26-29, 2016, New York City, NY.

Dealing with wicked problems: Strategies and technologies Paper presented at the 3rd Annual Meeting of the Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPoiSE3), May 19-22, 2016, Richardson, TX.

Collaborative and adversarial reframing: How to use argument mapping to cope with “wicked problems” and intractable conflicts. Paper presented at the 1st European Conference on Argumentation: Argumentation and Reasoned Action. 9-12 June 2015, Lisbon.

Realizing Peirce's ideas on self-controlled reasoning and the growth of reasonableness in collaborative argument mapping on the Internet. Paper presented at the ConStructPeirce Workshop, July 20-21, 2014, Houghton Library at Harvard University.

Changing the Practice of Knowledge Creation through Collaborative Argument Mapping on the Internet. 8th International Conference of the International Society for the Study of Argumentation. Proceedings, July 1-4, 2014, University of Amsterdam.

Some preliminary considerations about things needed for argument-based deliberation on the web. Arguing on the Web: Theory, Analysis and Application, June 30 – July 1. 2014, Amsterdam,

NL.

- Problem-based learning with the computer supported collaborative argument visualization software AGORA-net.* Annual Meeting of the Association for Practical and Professional Ethics, Jacksonville, FL, February 27 to March 2, 2014.
- Using Problem-based Learning to Prepare Students for Ill-structured Ethical Challenges.* Panel presentation at ASEE 2013 (American Society for Engineering Education), June 23 - 26, 2013, Atlanta.
- Collaborative, problem-based learning with the argument visualization software "AGORA-net."* American Association of Philosophy Teachers, Workshop on Teaching and Learning in Philosophy, June 1, 2013, Morehouse College.
- Problem-based learning with the argument visualization software "AGORA-net."* Ontario Society for the Study of Argumentation (OSSA), May 22-26, 2013, University of Windsor, Canada.
- AGORA-net: Web-based argument visualization as a tool for public deliberation and participation.* Paper presented at the Advancing Public Philosophy Conference, March 14 - 16, 2013.
- Collaborative online learning with the argument-visualization software "AGORA-net."* 4th International Conference on Argumentation, Rhetoric, Debate and the Pedagogy of Empowerment, Doha, Qatar, January 10-13, 2013.
- Teaching Critical Thinking in Online Learning Environments through Argument Visualization Software.* 2012 Eastern Division Meeting of the American Philosophical Association (APA), Atlanta, GA, December 27-30, 2012.
- Argument Mapping and Knowledge Management.* Model-Based Reasoning in Science and Technology. Theoretical and Cognitive Issues (MBR'012), Sestri Levante, Italy, June 21-23, 2012.
- Changing Engineering Ethics Education: Understanding ill-structured problems through argument visualization in collaborative learning.* 119th Annual Conference of the American Society for Engineering Education (ASEE), June 10 - 13, 2012, San Antonio, Texas.
- Cognitive Effects of Argument Visualization Tools.* 8th International Conference of the Ontario Society for the Study of Argumentation (OSSA), Windsor, CA, May 18-21, 2011, 1-12.
- Diagrams as Scaffolds for Creativity.* Visual Representations and Reasoning. A workshop of the 24th AAAI Conference on Artificial Intelligence (AAAI-10), Atlanta, July 11, 2010.
- Powerful Arguments: Logical Argument Mapping.* 7th Conference on Argumentation of the International Society for the Study of Argumentation, Amsterdam, NL, June 29 to July 2, 2010.
- Climate Ethics: Visualizing and Structuring an Ethical Debate by Means of Logical Argument Mapping.* American Philosophies Forum, The 2010 Symposium: The Future of Ethics, Emory University, Atlanta, April 8-10, 2010.
- Visualizing Webs of Beliefs, Values, and Attitudes for Cross-Cultural Understanding.* Global Dialogue Conference 2009: Responsibility -- Climate Change as Challenge for Intercultural Inquiry on Values, Aarhus University, Aarhus, Denmark.
- Explaining problems of interdisciplinary communication from a semiotic perspectives.* First International Workshop on the Philosophy of Interdisciplinarity, Atlanta, September 28-29, 2009.
- Analyzing Framing Processes By Means Of Logical Argument Mapping.* 21st Annual Conference of the International Association for Conflict Management (IACM), Chicago, July 3-6, 2008.
- Stimulating creativity by means of Logical Argument Mapping.* MOPAN - 15th Annual Conference on Multi-Organizational Partnerships, Alliances and Networks, Boston, June 25 - 27, 2008.
- Requirements for reflective argument visualization tools: a case for using validity as a normative standard.* 2nd International Conference on Computational Models of Argument (COMMA), Toulouse, France, 28-30 May 2008.
- Logical Argument Mapping: A cognitive-change-based method for building common ground.* 2nd International Pragmatic Web Conference, Tilburg, Netherlands, 22-23rd Oct. 2007.

- Power and limits of dynamical systems theory in conflict analysis.* 20th Annual Conference of the International Association for Conflict Management (IACM), Budapest, Hungary, July 1-4, 2007.
- Searching for common ground on Hamas through Logical Argument Mapping.* Ontario Society for the Study of Argumentation (OSSA), June 6 - 9, 2007, University of Windsor.
- Abduction and diagrammatic reasoning in a theory of scientific discovery.* Society for the Advancement of American Philosophy (SAAP). 34th Annual Meeting, Columbia, SC, March 8-10 2007.
- Quartadic Sign relations. A semiotic model of cognitive systems.* Semiotic Society of America (SSA). 2006 Annual meeting Purdue University, West-Lafayette, September 28 – October 1.
- Charles Peirce: Formen kreativer Tätigkeit in der Mathematik.* XX. Deutscher Kongreß für Philosophie in Berlin, September 26.-30., 2005: Kreativität.
- How to change your mind? Argument mapping as a tool to mediate conflicts.* First ISCAR Congress. International Society for Cultural and Activity Research, Seville, Spain, September 20-24, 2005.
- Model-based Reasoning: A Tool for Overcoming Epistemological Problems of Conflict Management.* 18th Annual Meeting of the International Association for Conflict Management (IACM), Seville, Spain, June 12-15, 2005.
- Navigating Knowledge Boundaries between Formal Education and Workplace.* Connections 2004 Conference. University of Victoria - Faculty of Education, May 6th, 2004.
- Die Rolle von Modellen in der Biologie.* 5. Internationaler Kongress der Gesellschaft für analytische Philosophie (GAP.5), September 22-26, 2003 in Bielefeld.
- „Entdeckendes Lernen“ - semiotisch gefasst.* 37. Tagung für Didaktik der Mathematik, March 3-7, 2003 in Dortmund.
- How to get it.* MBR '01: Model-Based Reasoning: Scientific Discovery, Technological Innovation, Values. Pavia, Italy, May 17-19, 2001.
- Skizze einer semiotischen Theorie des Lernens.* 35. Tagung für Didaktik der Mathematik, March 5-9, 2001 in Ludwigsburg.
- Die synthetisch-pragmatische Mathematikauffassung im Gegensatz zur analytischen – ein Blick auf die Geschichte der Philosophie der Mathematik.* Tagung: „Allgemeine Mathematik: Mathematik und Mensch“. Technische Hochschule Darmstadt, November 17-19, 2000.
- Semiotik im Spannungsfeld von Mathematik und ihrer Didaktik.* 1. Herbsttagung des GDM-Arbeitskreises „Semiotik in der Mathematikdidaktik“, September 21-22, 2000 in Soest.
- Semiotik in der Mathematikdidaktik. Zu einer möglichen Bündelung von Forschungsinteressen innerhalb der GDM.* 34. Tagung für Didaktik der Mathematik, February 28 to March 3, 2000 in Potsdam.
- Zur Rolle von Modellen und Metaphern bei der Entwicklung neuer Theorien.* XVIII. Deutscher Kongreß für Philosophie, Konstanz, October 4-8, 1999: Die Zukunft des Wissens.
- Die Peircesche Semiotik als Theorieansatz der Mathematikdidaktik.* Tagung „Mathematikdidaktische Theorieansätze“, Universität Köln, May 28-30, 1999.
- Using Signs in Abductive Reasoning: Peirce and the Problem of Creative Thinking and Acting.* 4. Congress of the International Society for Cultural Research and Activity Theory. *Activity Theory and Cultural Historical Approaches to Social Practice.* Aarhus University, Denmark, June 7-11, 1998, workshop: Means of Communication and Learning: Comparison of Vygotskij and Peirce.
- Elements of a Theory on Abduction.* International Congress on Discovery and Creativity, May 14-16, 1998, University of Ghent, Belgium.
- Erkenntnistheoretische Grundlagen des Lernens: Lernen als Verallgemeinerung.* 32. Tagung für Didaktik der Mathematik, March 2-6, 1998, in Munich.
- Is there a “Logic” of Abduction?* 6th Congress of the IASS-AIS, International Association for Semiotic Studies – Association Internationale de la Sémiotique, in Guadalajara, Mexico, July, 13-18,

1997: Semiotics Bridging Nature and Culture.

Die soziale und die gegenständliche Dimension von Verallgemeinerungsprozessen. Tagung: „Allgemeine Mathematik: Ordnen, Strukturieren, Mathematisieren“. Technische Hochschule Darmstadt, October 10-14, 1996.

Eine semiotische Modellierung von Verallgemeinerungsprozessen. XVII. Deutscher Kongreß für Philosophie in Leipzig, September 23-27, 1996: *Cognitio humana – Dynamik des Wissens und der Werte.*

The „Realization of the Due-Measure“ as Structural Principle in Plato's Statesman. Third Symposium Platonicum, University of Bristol, August 25-30, 1992.

Teaching

Goals

To train general skills and to learn specific methods: reflection and self-correction; how to approach wicked problems; how to construct strong and convincing arguments; how to assess the quality of arguments; how to clarify ideas; learning to work in teams; social learning through mutual criticism and support; enjoying clear thinking.

Graduate courses taught at Georgia Tech

		No. resp./ enrolled	Teaching efficiency (max. 5.0)	College median for this class size
Ethics and Epistemology in Public Policy, 3 hours, Public Policy MS program	Spring 2007	6/14	4.3	4.75
	Spring 2008	6/17	3.8	4.6
	Spring 2009	7/13	4.0	4.75
	Spring 2010	9/16	4.9	4.5
	Spring 2011	9/11	4.8	4.75
	Spring 2012	18/23	4.61	4.71
	Spring 2013	14/20	4.62	4.75
	Spring 2014	14/14	4.62	4.83
	Spring 2015	9/11	4.4	4.90
Spring 2016	5			
Methods of Argument Analysis and Construction in Public Policy, 3 hours, MS / PhD program	Fall 2008	2/4	4.5	4.83
Responsible Conduct of Research (RCR), 1 hour, PhD students: PHIL 6000 H1	Summer 2012	11/31	4.58	n/a
RCR: PHIL 6000 H2	Summer 2012	15/34	4.5	n/a
RCR: PHIL 6000 H3	Summer 2012	7/28	3.88	n/a
Introduction to Public Policy	Fall 2013	9/16	4.7	4.67
	Fall 2014	6/9	4.8	4.80
Social Justice, Critical Theory, and Philosophy of Design	Fall 2013	4/5	2.5	4.78

Undergraduate courses taught at Georgia Tech, with Student evaluation

		No. resp./ enrolled	Teaching efficiency (max. 5.0)	College median for this class size
Philosophy of Science, 3 hours	Fall 2004	16/29	4.8	4.50
	Fall 2005	16/34	4.9	4.50
	Fall 2006	13/38	4.3	4.34
	Fall 2007	15/31	4.3	4.56
	Fall 2008	13/35	4.8	4.61
	Fall 2009	16/33	4.6	4.63
Logic and Critical Thinking – Argumentation, 3 hours	Spring 2005	21/30	4.7	4.55
	Spring 2006	16/29	4.8	4.67
	Spring 2007	15/32	4.1	4.65
	Spring 2008	16/33	4.6	4.6
	Spring 2009	8/34	4.5	4.63
Science and Values in the Policy Process, 3 hours	Spring 2005	12/23	4.6	4.55
	Spring 2006	12/21	4.8	4.67
Modern Philosophy, 3 hours	Fall 2005	23/32	4.7	4.50
Interreligious Understanding (elective), 3 hours	Fall 2006	22/32	4.7	4.65
	Fall 2007	11/29	4.8	4.56
Engineering Ethics (before 2011: Ethics and the Technical Professions)	Sum. 2007	0/38		n/a
	Sum. 2007	6/42	4.5	n/a
	Sum. 2009	35/160	4.1	n/a
	Fall 2011	23/34	4.82	4.62
	Fall 2012	15/37	4.67	4.68
Introduction to Philosophical Analysis	Fall 2009	8/29	4.5	4.63
	Fall 2010	12/32	4.3	4.61
	Fall 2011	16/30	4.67	4.62
	Fall 2012	15/32	4.4	4.68
Philosophical Analysis of Policy Choices	Spring 2010	14/32	4.2	4.5
	Spring 2011	20/25	4.7	4.64
	Spring 2012	8/24	4.5	4.71
	Spring 2013	8/24	4.5	4.75
	Spring 2015	13/14	3.4	4.90
	Spring 2016	24		
Philosophical Analysis with argument mapping (Special Topics)	Fall 2015	5/6	5	
Science, Technology, and Human Values	Fall 2016	170		
VIP Digital Deliberation (http://www.vip.gatech.edu/teams/digital-deliberation)	Fall 2016	4		

Dissertation Adviser

- 2014 – present Rafael Castillo: Innovation intermediaries for inclusive development: the role of farmer cooperatives (co-adviser)
- 2012 – 2014 Fang Xiao: Interdisciplinarity Among Academic Scientists: Individual And Organizational Factors (co-adviser)
- 2008 Paul Hirsch: Making space for environmental problem solving (co-adviser)

Individual student guidance

- 2016, Fall: Benjamin Staver (MS), Graduate Research Assistant to support the VIP Digital Deliberation.
- 2016, Fall: Jenna McGrath, Daniel Sanbeg, and Aline Banboukian, Teaching Assistants.
- 2014, Summer, Undergraduate Internship supervision (Jonathan Vallecillo)
- 2014, Spring, 2 Graduate Research Assistants for coding AGORA-net (Lokesh Balakrishnan, Vinodh Krishnan).
- 2014, Spring, 1 Graduate Research Assistants for the Center for Ethics and Technology (Ethan Butler).
- 2013, Fall, 2 Graduate Research Assistants for the Center for Ethics and Technology (Caroline Appleton, Ethan Butler).
- 2013, Fall, 1 Graduate Research Assistant for coding AGORA-net (Lokesh Balakrishnan).
- 2013, Spring, 1 Graduate Research Assistant for analyzing ArguSkill critical thinking assessment results and helping to design the TechDebates on Ethics (Kirsten Bandyopadhyay).
- 2013, Spring, 3 Graduate Research Assistants for coding AGORA-net (Paul O’Neill, Lokesh Balakrishnan, Madhura Bhawe).
- 2012, Fall, 1 Undergraduate student: Mapping the functionality of AGORA-net and preparing tutorials (Anuraag Das).
- 2012, Fall, 3 Graduate Research Assistants for coding AGORA-net (Paul O’Neill, Lokesh Balakrishnan, Madhura Bhawe).
- 2012, Summer, Graduate Research Assistant for coding AGORA-net (Paul O’Neill)
- 2012, Spring, Computer Science undergraduate senior project for coding AGORA-net (Zachary Lee, Michelle Bjornas, Ruiqi Zhang)
- 2011, Fall, Graduate Research Assistant for coding AGORA: Participate – Deliberate! (Arun Kumar Chithanar)
- 2011, Spring, 2 Graduate Research Assistants for coding AGORA: Participate – Deliberate! (Mona Chitnis, Arun Kumar Chithanar)
- 2011, Spring, 1 undergraduate researcher, supporting the compilation of the AGORA learning material about genetically modified crops (Tyler J. Kaplan).
- 2010, Spring, Graduate Research Assistant for coding AGORA: Participate – Deliberate! (Karthik Rangarajan)
- 2009, Fall, graduate research project for coding AGORA: Participate – Deliberate! (Andrew Roberts)
- 2009, Summer, graduate research project to prepare a grant proposal and to develop a pilot version of a web-based, interactive argumentation tool: NIFPAD – National Ignition Facility for Participatory Democracy
- 2008, Summer, undergraduate research on controversial issues in public policy: 1 student
- 2008, Summer, undergraduate research on “Diagrammatic reasoning in cognitive science”: 1 student
- 2008, Spring, advisor for a graduate student and policy analyst at Georgia’s Administrative Office of

the Courts

- 2007, Spring, undergraduate research on “Deliberative Decision Making”: 1 student
- 2006, Summer, undergraduate research on “Logical Argument Mapping”: 1 student.
- 2006, Summer, internship advisor for 2 students.
- 2006, Spring, undergraduate research on “Interreligious Understanding”: 10 students
- 2006, Fall, Undergraduate Research Assistantship for a student who was awarded the President's Undergraduate Research Award (PURA). Project title: “Intelligent design: Documenting a debate about 'What is science?'.”
- 2006, Fall, directed reading course (with letter grade) for one graduate student.

Membership in academic societies

ISSA – International Society for the Study of Argumentation

OSSA – Ontario Society for the Study of Argumentation

PIN – Philosophy of / as Interdisciplinarity Network

Public Philosophy Network

SRPoiSE – Consortium for Socially Relevant Philosophy of/in Science and Engineering

Service

Professional Contributions

EDITORIAL

- 2011 – 2012 Leading editor, in collaboration with Jan Schmidt and Nancy Nersessian, of the Special Issue “Philosophy of and as Interdisciplinarity” in *Synthese*
- 2009 – present Creator and administrator of the PIN web page at <http://pin-net.gatech.edu>
- 2007 – present Member of the Editorial Board for the Book Series “Semiotic Perspectives in the Teaching and Learning of Mathematics”

ORGANIZATIONAL

- 2012, Sept. 21-23 4th International Workshop on “Philosophy of/as Interdisciplinarity,” together with Jan C. Schmidt, Darmstadt/Germany, and Robert Frodeman and Britt Holbrook, UNT, in Tübingen, Germany
- 2011, March 7-9 3rd International Workshop on “Philosophy of/as Interdisciplinarity: New Practices of Philosophy: Taking Philosophy beyond Disciplinary Bounds” together with Jan C. Schmidt, Darmstadt/Germany, and Robert Frodeman and Britt Holbrook, UNT, at the University of North Texas.
- 2010, Sept. 18-21 2nd International Workshop on “Philosophy of/as Interdisciplinarity,” together with Jan C. Schmidt, Darmstadt/Germany, and Robert Frodeman and Britt Holbrook, UNT, in Neversdorf/Hamburg
- 2009, Sept. 28-30 International workshop on “Philosophy of Interdisciplinarity,” together with Jan C. Schmidt, Darmstadt University of Applied Sciences, and Alan Porter, Georgia Institute of Technology, at Georgia Tech, Atlanta
- 2009 – present Co-founder and Co-Director, with Jan Schmidt, Robert Frodeman, and Britt Holbrook, of

PIN – Philosophy of / as Interdisciplinarity Network

2000 – 2004	Initiator and director of the research group “Semiotic in Mathematics Education” within GDM (Ges. f. Didaktik d. Math.)
2003, Sept. 24-26, 2001, Sept. 25-27, 2000, Sept. 21-22	Organization of three conferences of the research group “Semiotic in Mathematics Education”
2003, March 3-7	Organization of three workshops at the 37. Tagung für Didaktik der Mathematik, in Dortmund
2001, March 5-9	Organization of a workshop of the research group “Semiotic in Mathematics Education” at the 35. Tagung für Didaktik der Mathematik, in Ludwigsburg

ADVISORY

2012 – present	Member of the Advisory Board of the Springer series “Studies In Applied Philosophy, Epistemology And Rational Ethics” (SAPERE)
2007 – 2009	Invited Consultant of the “Lisbon Centre of the Image between science and art (LCISA),” Faculdade de Ciências, Universidade de Lisboa, Portugal
1999 – 2005	Member of the Advisory Committee of the <i>German Society for Semiotic DGS – Deutsche Gesellschaft für Semiotik e.V.</i> , responsible for the field of mathematics education.

Public and community service

Creator of the The English Avenue Justice Program, an imitative of the Center for Ethics and Technology (CET). The English Avenue community is Georgia Tech’s poor and distressed neighbor in the West of campus. In collaboration with the Westside Community Alliance, CET develops projects relating to social justice and the ethics of the built environment that are designed in collaboration with partners in the English Avenue community and integrated in regularly offered courses and seminars. The program started in the fall of 2013 with the newly developed Seminar “Social Justice, Critical Theory, and Philosophy of Design.”

Further projects included:

- A collaboration with Safe Routes to School as a strategy for community development.
- Co-Organizer of the Community Think Tank in English Avenue on Human Development, in a collaboration with the Historic Westside Cultural Arts Council (HWCAC). The Think Tank organized a series of community meetings from November 2013 to May 2015. The Think Tank aimed to offer an open place in the English Avenue neighborhood for the community, and for adjacent communities, on Atlanta’s West Side to explore and deliberate conditions and possibilities of human development for the people living there. The focus was largely on African Americans and others who are marginalized by public and social policies.

Campus contributions

BOARD OF REGENTS

2010, Sept – present	Member of the BOR Philosophy and Religion Advisory Committee, representing GT’s Philosophy Program
----------------------	--

INSTITUTE

- 2015, Sept – Aug 2018 Member of the Academic Faculty Senate
- 2016, Mar 14 Moderator of the debate “Atheism or Christianity: Which makes more sense?” between Dr. Ed Buckner and Dr. Wallace Marshall, hosted by the Georgia Tech student group Why Should I Believe

COLLEGE

- 2012, Oct – present Associate Director of the Center for Ethics and Technology at Georgia Tech
- 2012, Aug – 2013, May Convener of a team (Carol Colatrella, Susan Cozzens, Hugh Crawford, Carl DiSalvo, Anne Pollock, Robert Rosenberger) that developed the class “Social Justice, Critical Theory, and Philosophy of Design” for the STS Graduate Certificate.

SCHOOL

- 2007, May – 2013, July;
2014, Aug – present Director of the Philosophy Program at Georgia Tech
- 2013, Aug – 2014, July Interim Chair of the School of Public Policy
- 2011, Jan – May Director of the Public Policy Undergraduate Program (BSPP) at Georgia Tech
- 2011, Mar – present Chair of the School of Public Policy's OATS team that is responsible for developing and deploying an instrument for the BSPP program assessment
- 2008, Aug – present Member of the Undergraduate Committee
- 2008, Aug – 2010, July Faculty Executive Committee (FEC)
- 2008, Aug – 2009, April Chair of the SPP Search Committee for “one or more” philosophy positions
- 2006, May – 2007, April Chair of the School of Public Policy (SPP) Committee for Strategic Planning 2006-2007
- 2005, Oct. – 2006, May Member of the SPP Search Committee “Philosophy of Technology”
- 2004, Aug. – present Organization of the SPP “Philosophy Club”
- 2004, Aug. – 2006, Apr. Organization of the “School of Public Policy Research Seminar”

Funded Projects

Hoffmann, Michael (PI), Richard Catrambone (School of Psychology), and Jeremy Lingle (Center for Education Integrating Science, Mathematics, and Computing): Fostering Self-Correcting Reasoning with Reflection Systems. National Science Foundation (Cyberlearning and Future Learning Technologies), September 2016 to August 2019. **\$ 549,958.**

Hoffmann, Michael, and Christopher Le Dantec (School for Literature, Media, and Communication): Digital Deliberation. A faculty grant from the Digital Integrative Liberal Arts Center (DILAC) Fund, Ivan Allen College, Georgia Tech, May 2016 to April 2017. **\$ 19,335.**

Goel, Ashok (PI, Interactive Computing), Rahul Basole (IC), Timothy Boone (GTRI), Daniel Campbell (GTRI), Michael Chang (BBISS), Edward Coyle (ECE), John Crittenden (CEE), Bistra Dilkina (CSE), Jacob Eisenstein (IC), Alex Endert (IC), Sherry Farrugia (IPaT), Karen Feigh (AE), Katherine Fu (ME), Daniel Haynes (CETL), Michael Hoffmann (Public Policy), Karl Jacob (MSE), Roger Jiao (ME), David Joyner (OMSCS), Julie Linsey (ME), Wayne Li (ID), Margaret

Loper (GTRI), Amanda Madden (C21U), Keith McGreggor (IC), Elizabeth Mynatt (IC), Wendy Newstetter (CoE), Chaohua Oh (CETL), Christian Paredis (ME), Amy Pritchett (AE), Mark Riedl (IC), David Rosen (ME), Spencer Rugaber (CS), Chrissy Spencer (Biology), Eric Schumacher (Psychology), Cassandra Telenko (ME), William Underwood (GTRI), Alan Wagner (GTRI), Marc Weissburg (Biology), Leanne West (GTRI), Elizabeth Whitaker (GTRI), Jeannette Yen (Biology): From Big Data to Deep Insights: Using Watson as a Conversational Cognitive System. IDEAS grant, Georgia Institute of Technology, August 2015 to July 2016. **\$ 40,000.**

Kirkman, Robert, and Michael Hoffmann: Development Proposal for A Modular, Non-Credit Course in Professional Ethics. Funded by Georgia Tech Professional Education, August 2012 to July 2013. **\$ 13,999.**

Schmidt, Jan, Michael Hoffmann, Robert Frodeman, Britt Holbrook: *Development and consolidation of the Philosophy of / as Interdisciplinarity Network (PIN-net)*. Funded by the Udo Keller Stiftung, Neversdorf/Hamburg (Germany): **26.000 Euro plus accommodations** for a workshop in 2010 and a conference in 2012.

Hoffmann, Michael (Philosophy), Stuart Goldberg (Russian), Steve McLaughlin (Vice Provost for International Initiatives), and Jason Borenstein (Director of Graduate Research Ethics Programs): *Promoting Educational and Academic Collaboration between the United States and the Russian Federation by Developing the Web-based Learning Tool AGORA, Developing Engineering Ethics Education and Distance Engineering Laboratories, Sharing Educational Achievements, and by Establishing a Student and Faculty Mobility Program*. Fund for the Improvement of Postsecondary Education (FIPSE) of the U.S. Department of Education and the Russian Ministry of Education and Science of the Russian Federation. Grant # P116-S10-0006. September 1, 2010, to August 31, 2015: **\$ 399,860.**

Awards

- 2011 Gold Star Award in recognition of the highest level of accomplishment in research. Awarded by Georgia Tech's Ivan Allen College of Liberal Arts.
- 2006 Mouton d'Or award for the article "What you should know to survive in knowledge societies: On a semiotic understanding of 'knowledge'," which appeared in *Semiotica Volume 157-1/4* (2005). Coauthor: Wolff-Michael Roth (I am first author)

Atlanta, September 1st, 2016