

Seth D. Baum

Curriculum Vitae, January 2023

<http://sethbaum.com> • <http://gcrinstitute.org> • seth@gcrinstitute.org

PERSONAL INFORMATION

Date of Birth: 17 October 1980

Citizenship: USA

Residence: New York City

EDUCATION

2012: Ph.D., Geography, Pennsylvania State University
Dissertation Title: *Discounting Across Space and Time in Climate Change Assessment*
Advisor: William E. Easterling

2006: M.S., Electrical Engineering, Northeastern University
Concentration in Electromagnetics
Thesis Title: *User and Developer Interface Improvements to a Finite Difference Time Domain Code*
Advisor: Carey Rappaport

2003: B.S., Optics; B.S., Applied Mathematics; Minor, French, University of Rochester

CURRENT POSITIONS

Primary Position

2011-present: Co-Founder and Executive Director, Global Catastrophic Risk Institute

Other Affiliations

2019-present: Associate Editor, *Science and Engineering Ethics*

2017-present: Research Affiliate, Centre for the Study of Existential Risk, Cambridge University

2016-present: Associate Editor, *AI & Society*

PRIOR POSITIONS – RESEARCH

- 2011-2018: Research Scientist, Blue Marble Space Institute of Science
- 2012-2016: Affiliate Researcher, Center for Research on Environmental Decisions, Columbia University
- 2012-2016: Affiliate Scholar, Institute for Ethics and Emerging Technologies
- 2010-2012: Graduate Research Assistant & Post-Doctoral Scholar, Center for Research on Environmental Decisions, Pennsylvania State University & Columbia University
- 2008-2009: Research Assistant, Rock Ethics Institute, Pennsylvania State University
- 2008-2009: Research Assistant, Climate Risk Management Initiative, Penn. State University
- 2003: Research Assistant, Lawrence Livermore National Laboratory
- 2001: Research Assistant, University of Rochester

PRIOR POSITIONS – TEACHING

Course Instructor

- 2009-2011: Geography 030: Geographic Perspectives on Sustainability and Human-Environment Systems, Pennsylvania State University. Four semesters.
- 2004: Introduction to MatLab. Research Experience for Teachers Program (for high school teachers), Northeastern University. Designed and taught course.

Course Developer

- 2009-2011: Geography 030 (Web): Geographic Perspectives on Sustainability and Human-Environment Systems, Pennsylvania State University.

University Teaching Assistantships

- 2004: Electrical Engineering Technology U201: Circuit Analysis 1, Spring Semester, Northeastern University.
- 2003: Electrical & Computer Engineering U210: Electrical Engineering, Fall Semester, Northeastern University.

K-12 Teaching/Outreach

- 2004-2007: National Science Foundation GK-12 Fellow, Northeastern University

- 2004: Substitute Teacher, Boston Public Schools
- 2002: Rochester Urban Fellow, University of Rochester

GRANTS & AWARDS

Note: This list covers select major items and does not include all funds raised.

- 2021: Principal Investigator on Global Catastrophic Risk Institute grant. Source: Jaan Tallinn via Survival and Flourishing Fund. \$48,000.
- 2021: Principal Investigator on Global Catastrophic Risk Institute grant. Source: Jaan Tallinn via Survival and Flourishing Fund. \$209,000.
- 2020: Principal Investigator on Global Catastrophic Risk Institute grant. Source: Jaan Tallinn and Jed McCaleb via Survival and Flourishing Fund. \$140,000.
- 2019: Principal Investigator on Global Catastrophic Risk Institute grant “2020 AI Projects”. Source: Gordon R. Irlam Charitable Foundation. \$250,000.
- 2018: Principal Investigator on Global Catastrophic Risk Institute grant “2019 AI Projects”. Source: Gordon R. Irlam Charitable Foundation. \$250,000.
- 2018: Principal Investigator on Global Catastrophic Risk Institute grant. Source: Berkeley Existential Risk Initiative. \$25,000.
- 2018: Principal Investigator on Global Catastrophic Risk Institute grant “AGI Project Interviews”. Source: Gordon R. Irlam Charitable Foundation. \$60,000.
- 2017: Principal Investigator on Global Catastrophic Risk Institute grant “The Geopolitics of Artificial Intelligence and Its Implications for AI Safety Policy and Strategy”. Source: Gordon R. Irlam Charitable Foundation. \$15,000.
- 2016: Finalist for the Bernard Brodie Prize for the best article in *Contemporary Security Policy* over the previous year, for the article “Winter-safe deterrence: The risk of nuclear winter and its challenge to deterrence”.
- 2015-2016: Investigator on Global Catastrophic Risk Institute grant “Analysis of Cyber Infrastructure Authentication Failure Vulnerabilities to Inform Security Decisions”. With Anthony Barrett and Roman Yampolskiy. Source: U.S. Department of Homeland Security. \$50,000.
- 2015-2016: Investigator on Global Catastrophic Risk Institute grant “Transitioning Analysis of Current and Future Catastrophic Risks from Emerging-Threat Technologies”. With Anthony Barrett and Jun Zhuang. Source: U.S. Department of Homeland Security. \$50,000.

- 2015: Co-Principal Investigator on Global Catastrophic Risk Institute grant “Evaluation of Safe Development Pathways for Artificial Superintelligence”. With Anthony Barrett. Source: Future of Life Institute/Elon Musk/Open Philanthropies Project. \$100,000.
- 2015: Principal Investigator on Global Catastrophic Risk Institute grants “Initial Nuclear Probability and Impact Assessment” and “Quarterly Global Risk and Opportunity Report”. Source: Global Challenges Foundation. \$55,000.
- 2015: Fellow, Emerging Leaders in Biosecurity Initiative, Center for Health Security, University of Pittsburgh Medical Center.
- 2014-2015: Investigator on Global Catastrophic Risk Institute grant “Extending Analysis of Current and Future Catastrophic Risks from Emerging-Threat Technologies”. With Anthony Barrett and Jun Zhuang. Source: U.S. Department of Homeland Security. \$35,000.
- 2014: Principal Investigator on Global Catastrophic Risk Institute grant “Global Challenges Report”. Source: Global Challenges Foundation. \$3,000.
- 2013-2014: Investigator on Global Catastrophic Risk Institute grant “Analyzing Current and Future Catastrophic Risks from Emerging-Threat Technologies”. With Anthony Barrett and Jun Zhuang. Source: U.S. Department of Homeland Security. \$50,000.
- 2012: Principal Investigator on Global Catastrophic Risk Institute project “Survey of Climate Change Social Science Research Services”. With Kaitlin Butler and Grant Wilson. Source: Skoll Global Threats Fund. \$8,658.
- 2011-2012: Co-Principal Investigator on Global Catastrophic Risk Institute donation. With Anthony Barrett. Source: Saving Humanity from Homo Sapiens. \$8,400.
- 2010-2012: Sub-contract on Columbia Univ. Center for Research on Environmental Decisions grant. With William Easterling. Source: National Science Foundation. \$121,000.
- 2011: Co-Investigator on Blue Marble Space Consulting Group grant. With Principal Investigator Jacob Haqq-Misra and others. Source: Lone Signal. \$7,700.
- 2010-2011: Won position on the Geography Bowl team of the Middle States Division of the Association of American Geographers. Source: MSDAAG & AAG. \$383.33.
- 2010: Best Presentation Award (one of two awardees among Ph.D. students). Technology, Management and Policy Graduate Consortium 2010 Meeting.
- 2010: Student Merit Award. Source: Society for Risk Analysis Economics and Benefits Analysis Specialty Group. \$500 + Conference Registration Fee.
- 2009-2010: Chosen as a Public Scholarship Fellow, Pennsylvania State University.

- 2008: Dissertation Proposal Development Fellowship. Source: Social Science Research Council. \$4700.
- 2007: Winning essay in the Ethics of Climate Change essay contest, Economics/Business section. Source: *Ethics in Science and Environmental Politics*. \$1000.

PEER REVIEWS

Notation: *Journal Name* (year of reviews: number of reviews in that year)

To the reader: I include the number of reviews to promote more professional credit being given for performing peer reviews. I encourage others to do the same on their curriculum vitae.

AI & Society (2016:1; 2018:3; 2020:1; 2021:4; 2022:1)
Ambio (2014:1)
Applied Geography (2011:1)
Big Data and Cognitive Computing (2018:1)
Bioethics (2012:1)
Biology & Philosophy (2021:1)
 Book chapters (2014:1; 2017:2; 2019:1)
Challenges (2020:1)
Climate Policy (2011:1; 2015:1)
Communications of the ACM (2021:1)
Conference on AI for People (2021:2)
Contemporary Security Policy (2016:1)
Data Mining and Knowledge Discovery (2021:1)
Ecological Economics (2009:2; 2010:2; 2011:1; 2012:2; 2013:2; 2014:3; 2015:1; 2016:1; 2017:1; 2022:1)
Electronics (2020:1)
Energies (2020:1)
Environmental Research Letters (2009:1)
Environmental Science and Pollution Research (2018:1)
Environment, Systems and Decisions (2012:1; 2014:1; 2015:1; 2018:1; 2021:1)
Futures (2013:2; 2015:4; 2016:4; 2017:2; 2018:4; 2019:7; 2020:4; 2021:1)
Global Policy (2015:2; 2019:1)
IAFOR Journal of Sustainability, Energy and the Environment (2013:1)
ICT Express (2021:1)
IEEE Transactions on Technology and Society (2021:1)
Informatica (2017:1)
Informatics (2020:1)
Information (2018:4; 2019:1)
International Journal of Astrobiology (2020:1)
International Journal of Disaster Risk Reduction (2017:1)
International Journal of Human-Computer Interaction (2022:1)
International Journal of Technoethics (2018:1; 2020:1)
Journal of Evolution and Technology (2018:1)
Journal of Geography (2014:1; 2018:1; 2019:1; 2021:1)
Journal of Philosophy (2020:1)

Journal of Risk Research (2019:1; 2020:2; 2022:1)
Minds and Machines (2022:1)
Mitigation and Adaptation Strategies for Global Change (2013:1)
Nordic Journal of Human Rights (2022:1)
Philosophies (2019:1)
Philosophy & Technology (2016:1; 2019:1; 2021:1)
Physica Scripta (2015:1)
Policy Sciences (2020:1)
Quaternary Research (2016:1)
Risk Analysis (2011:1; 2012:1; 2017:1; 2018:1; 2019:2; 2020:1; 2021:2; 2022:1)
Science and Engineering Ethics (2014:1; 2016:1; 2017:1; 2018:5; 2019:1)
Scientific African (2021:1)
Scottish Journal of Political Economy (2012:1)
Social Theory and Practice (2013:1)
Solutions (2016:1)
Space Policy (2014:1; 2017:2; 2019:1)
Sustainability (2020:2)
Technological Forecasting & Social Change (2014:2; 2015:5; 2017:1; 2019:1; 2020:1; 2021:3; 2022:1)
WIREs Climate Change (2014:1)

PUBLICATIONS – ACADEMIC

* Denotes co-authors whose work was conducted as an advisee, assistant, or intern of mine.
 # Denotes articles that were not peer reviewed.

Edited Collections

Baum, Seth D. and Bruce E. Tonn (Editors), 2015. “Confronting future catastrophic threats to humanity”. *Futures* (special issue), vol. 72 (September), pages 1-96.

Journal Articles

Baum, Seth D. “Assessing natural global catastrophic risks”. *Natural Hazards*, forthcoming, DOI 10.1007/s11069-022-05660-w.

Baum, Seth D. and Vanessa M. Adams. “Pandemic refuges: Lessons from two years of COVID-19”. *Risk Analysis*, forthcoming.

Owe, Andrea and Seth D. Baum, 2021. “The ethics of sustainability for artificial intelligence”. In Philipp Wicke, Marta Ziosi, João Miguel Cunha, and Angelo Trotta (Editors), *Proceedings of the 1st International Conference on AI for People: Towards Sustainable AI (CAIP 2021)*, Bologna, pages 1-17, DOI 10.4108/eai.20-11-2021.2314105.

Galaz, Victor, Miguel A. Centeno, Peter W. Callahan, Amar Causevic, Thayer Patterson, Irina Brass, Seth Baum, Darryl Farber, Joern Fischer, David Garcia, Timon McPhearson, Daniel Jimenez, Brian King, Paul Larcey, and Karen Levy, 2021. "Artificial intelligence, systemic risks, and sustainability". *Technology in Society*, vol. 67 (November), article 101741, DOI 10.1016/j.techsoc.2021.101741.

Cihon, Peter, Moritz J. Kleinaltenkamp, Jonas Schuett, and Seth D. Baum, 2021. "AI certification: Advancing ethical practice by reducing information asymmetries". *IEEE Transactions on Technology and Society*, vol. 2, no. 4 (December), pages 200-209.

Owe, Andrea and Seth D. Baum, 2021. "Moral consideration of nonhumans in the ethics of artificial intelligence". *AI & Ethics*, vol. 1, no. 4 (November), pages 517-528.

Baum, Seth D., 2021. "Artificial interdisciplinarity: Artificial intelligence for research on complex societal problems". *Philosophy & Technology*, vol. 34, no. S1 (November), pages 45-63.

Cihon, Peter, Jonas Schuett, and Seth D. Baum, 2021. "Corporate governance of artificial intelligence in the public interest". *Information*, vol. 21, article 275, doi 10.3390/info12070275.

Baum, Seth D., 2020. "Social choice ethics in artificial intelligence". *AI & Society*, vol. 35, no. 1 (March), pages 165-176.

Baum, Seth D., 2019. "Risk-risk tradeoff analysis of nuclear explosives for asteroid deflection". *Risk Analysis*, vol. 39, no. 11 (November), pages 2427-2442.

Baum, Seth D., Stuart Armstrong, Timoteus Ekenstedt, Olle Häggström, Robin Hanson, Karin Kuhlemann, Matthijs M. Maas, James D. Miller, Markus Salmela, Anders Sandberg, Kaj Sotala, Phil Torres, Alexey Turchin, and Roman V. Yampolskiy, 2019. "Long-term trajectories of human civilization". *Foresight*, vol. 21, no. 1, pages 53-83.

- Winner, 2020 Literati Award for Outstanding Paper in *Foresight*

Baum, Seth D., 2018. "Reconciliation between factions focused on near-term and long-term artificial intelligence". *AI & Society*, vol. 33, no. 4 (November), pages 565-572.

Baum, Seth D., 2018. "Uncertain human consequences in asteroid risk analysis and the global catastrophe threshold". *Natural Hazards*, vol. 94, no. 2 (November), pages 759-775.

Baum, Seth D., 2018. "Countering superintelligence misinformation". *Information*, vol. 9, no. 10, article 244, doi 10.3390/info9100244.

Baum, Seth D., 2018. "Superintelligence skepticism as a political tool". *Information*, vol. 9, no. 9, article 209, doi 10.3390/info9090209.

Umbrello, Steven* and Seth D. Baum, 2018. "Evaluating future nanotechnology: The net societal impacts of atomically precise manufacturing". *Futures*, vol. 100 (June), pages 63-73.

Baum, Seth D., Anthony M. Barrett, and Roman V. Yampolskiy, 2017. “Modeling and interpreting expert disagreement about artificial superintelligence”. *Informatica*, vol. 41, no. 4 (December), pages 419-427.

Baum, Seth D., 2017. “On the promotion of safe and socially beneficial artificial intelligence”. *AI & Society*, vol. 32, no. 4 (November), pages 543-551.

Barrett, Anthony M. and Seth D. Baum, 2017. “A model of pathways to artificial superintelligence catastrophe for risk and decision analysis”. *Journal of Experimental & Theoretical Artificial Intelligence*, vol. 29, no. 2, pages 397-414.

Baum, Seth D., David C. Denkenberger, and Joshua M. Pearce, 2016. “Alternative foods as a solution to global food supply catastrophes”. *Solutions*, vol. 7, no. 4, pages 31-35.

Baum, Seth D., 2015. “The far future argument for confronting catastrophic threats to humanity: Practical significance and alternatives”. *Futures*, vol. 72 (September), pages 86-96.

Baum, Seth D., 2015. “Confronting the threat of nuclear winter”. *Futures*, vol. 72 (September), pages 69-79.

Baum, Seth D., David C. Denkenberger, Jacob Haqq-Misra, 2015. “Isolated refuges for surviving global catastrophes”. *Futures*, vol. 72 (September), pages 45-56.

Baum, Seth D., 2015. “Risk and resilience for unknown, unquantifiable, systemic, and unlikely/catastrophic threats”. *Environment, Systems, and Decisions*, vol. 35, no. 2 (June), pages 229-236.

Baum, Seth D., David C. Denkenberger, Joshua M. Pearce, Alan Robock, and Richelle Winkler. “Resilience to global food supply catastrophes”. *Environment, Systems, and Decisions*, vol. 35, no. 2 (June), pages 301-313.

Baum, Seth D., 2015. “Winter-safe deterrence: The risk of nuclear winter and its challenge to deterrence”. *Contemporary Security Policy*, vol. 36, no. 1 (April), pages 123-148.

Baum, Seth D., 2014. “The great downside dilemma for risky emerging technologies”. *Physica Scripta*, vol. 89, no. 12 (December), article 128004, doi:10.1088/0031-8949/89/12/128004.

Baum, Seth D. and Itsuki C. Handoh, 2014. “Integrating the planetary boundaries and global catastrophic risk paradigms”. *Ecological Economics*, vol. 107 (November), pages 13-21.

Baum, Seth D. and Grant S. Wilson, 2013. “The ethics of global catastrophic risk from dual-use bioengineering”. *Ethics in Biology, Engineering and Medicine*, vol. 4, no. 1, pages 59-72.

Barrett, Anthony M., Seth D. Baum, and Kelly R. Hostetler*, 2013. “Analyzing and reducing the risks of inadvertent nuclear war between the United States and Russia”. *Science and Global Security*, vol. 21, no. 2, pages 106-133.

Maher, Timothy M., Jr.* and Seth D. Baum, 2013. "Adaptation to and recovery from global catastrophe". *Sustainability*, vol. 5, no. 4 (April), pages 1461-1479.

Baum, Seth D., Timothy M. Maher Jr.*, and Jacob Haqq-Misra, 2013. "Double catastrophe: Intermittent stratospheric geoengineering induced by societal collapse". *Environment, Systems, and Decisions*, vol. 33, no. 1 (March), pages 168-180.

Haqq-Misra, Jacob, Michael W. Busch, Sanjoy M. Som, and Seth D. Baum, 2013. "The benefits and harm of transmitting into space". *Space Policy*, vol. 29, no. 1 (February), pages 40-48.

Baum, Seth D., 2013. "Teaching astrobiology in a sustainability course". *Journal of Sustainability Education*, February (online): http://www.jsedimensions.org/wordpress/content/teaching-astrobiology-in-a-sustainability-course_2013_02.

Baum, Seth D., 2012. "Value typology in cost-benefit analysis". *Environmental Values*, vol. 21, no. 4 (November), pages 499-524.

Baum, Seth D., Destiny D. Aman, and Andrei L. Israel, 2012. "Public scholarship student projects for introductory environmental courses". *Journal of Geography in Higher Education*, vol. 36, no. 3 (August), pages 403-419.

Schienze, Erich W., Seth D. Baum, Nancy Tuana, Kenneth J. Davis, and Klaus Keller, 2011. "Intrinsic ethics regarding integrated assessment models for climate management". *Science and Engineering Ethics*, vol. 17, no. 3 (September), pages 503-523.

Baum, Seth D., Jacob D. Haqq-Misra, and Shawn D. Domagal-Goldman, 2011. "Would contact with extraterrestrials benefit or harm humanity? A scenario analysis". *Acta Astronautica*, vol. 68, no. 11-12 (June-July), pages 2114-2129.

Baum, Seth D., Ben Goertzel, and Ted G. Goertzel, 2011. "How long until human-level AI? Results from an expert assessment". *Technological Forecasting and Social Change*, vol. 78, no. 1 (January), pages 185-195.

Baum, Seth D. and William E. Easterling, 2010. "Space-time discounting in climate change adaptation". *Mitigation and Adaptation Strategies for Global Change*, vol. 15, no. 6 (August), pages 591-609.

Baum, Seth D., 2010. "Is humanity doomed? Insights from astrobiology". *Sustainability*, vol. 2, no. 2 (February), pages 591-603.

Baum, Seth D., 2010. "Universalist ethics in extraterrestrial encounter". *Acta Astronautica*, vol. 66, no. 3-4 (February-March), pages 617-623.

Schienze, Erich W., Nancy Tuana, Donald A. Brown, Kenneth J. Davis, Klaus Keller, James S. Shortle, Michelle Stickler, and Seth D. Baum, 2009. "The role of the NSF Broader Impacts Criterion in enhancing research ethics pedagogy". *Social Epistemology*, vol. 23, no. 3-4 (July-December), pages 317-336.

Baum, Seth D., 2009. "Description, prescription and the choice of discount rates". *Ecological Economics*, vol. 69, no. 1 (15 November), pages 197-205.

Baum, Seth D., 2009. "Cost-benefit analysis of space exploration: Some ethical considerations". *Space Policy*, vol. 25, no. 2 (May), pages 75-80.

Haqq-Misra, Jacob D. and Seth D. Baum, 2009. "The 'Sustainability Solution' to the Fermi Paradox". *Journal of the British Interplanetary Society*, vol. 62, no. 2 (February), pages 47-51.

Hunt, Colin and Seth Baum, 2009. "The 'hidden' social costs of forestry offsets". *Mitigation and Adaptation Strategies for Global Change*, vol. 14, no. 2 (February), pages 107-120.

Baum, Seth, 2007. "Beyond the Ramsey model for climate change assessments". *Ethics in Science and Environmental Politics*, vol. 2007, pages 15-21.

Book Chapters

Baum, Seth D., Robert de Neufville, Anthony M. Barrett, and Gary Ackerman, forthcoming. "Lessons for artificial intelligence from other global risks". In Maurizio Tinnirello (Editor), *The Global Politics of Artificial Intelligence*. Boca Raton: CRC Press.

Baum, Seth D., 2018. "Resilience to global catastrophe". In Benjamin D. Trump, Marie-Valentine Florin, and Igor Linkov (Editors), *IRGC Resource Guide on Resilience (Vol. 2): Domains of Resilience for Complex Interconnected Systems*. Lausanne: EPFL International Risk Governance Center. Available at <https://irgc.epfl.ch/risk-governance/projects-resilience>.

Baum, Seth D. and Anthony M. Barrett, 2018. "Global catastrophes: The most extreme risks". In Vicki Bier (Editor), *Risk in Extreme Environments: Preparing, Avoiding, Mitigating, and Managing*. New York: Routledge, pages 174-184.

White, Trevor N.* and Seth D. Baum, 2017. "Liability law for present and future robotics technology". In Patrick Lin, Keith Abney, and Ryan Jenkins (Editors), *Robot Ethics 2.0*, Oxford: Oxford University Press, pages 66-79.

Barrett, Anthony M. and Seth D. Baum, 2017. "Risk analysis and risk management for the artificial super intelligence research and development process". In James Miller, Vic Callaghan, Roman Yampolskiy, and Stuart Armstrong (Editors), *The Technological Singularity: A Pragmatic Perspective*. Berlin: Springer, pages 127-140.

Baum, Seth D., 2016. "The ethics of outer space: A consequentialist perspective". In James S.J. Schwartz and Tony Milligan (Editors), *The Ethics of Space Exploration*, Berlin: Springer, pages 109-123.

Conference Proceedings

Owe, Andrea and Seth D. Baum, 2021. “The ethics of sustainability for artificial intelligence”. In Philipp Wicke, Marta Ziosi, João Miguel Cunha, and Angelo Trotta (Editors), *Proceedings of the 1st International Conference on AI for People: Towards Sustainable AI (CAIP 2021)*, Bologna, pages 1-17.

Baum, Seth D., 2018. “Reflections on the risk analysis of nuclear war”. B. John Garrick (Editor), *Proceedings of the Workshop on Quantifying Global Catastrophic Risks*, Garrick Institute for the Risk Sciences, University of California, Los Angeles, pages 19-50.

Baum, Seth D. and Anthony M. Barrett, 2017. “Towards an integrated assessment of global catastrophic risk”. B.J. Garrick (editor), *Catastrophic and Existential Risk: Proceedings of the First Colloquium*, Garrick Institute for the Risk Sciences, University of California, Los Angeles, pages 41-62.

Reports and Working Papers

Fitzgerald, M., Aaron Boddy, and Seth D. Baum, 2020. “2020 survey of artificial general intelligence projects for ethics, risk, and policy”. Global Catastrophic Risk Institute Technical Report 20-1.

Baum, Seth D. and Anthony M. Barrett, 2018. “A model for the impacts of nuclear war”. Global Catastrophic Risk Institute Working Paper 18-2.

Baum, Seth D., Robert de Neufville, and Anthony M. Barrett, 2018. “A model for the probability of nuclear war”. Global Catastrophic Risk Institute Working Paper 18-1.

Baum, Seth D., 2017. “A survey of artificial general intelligence projects for ethics, risk, and policy”. Global Catastrophic Risk Institute Working Paper 17-1.

Introductions

Baum, Seth D. and Bruce E. Tonn, 2015. Introduction: Confronting future catastrophic threats to humanity. *Futures*, vol. 72 (September), pages 1-3.

Comments

Baum, Seth D. and Andrea Owe, forthcoming. “From AI for people to AI for the world and the universe”. *AI & Society*.

Baum, Seth D. and Andrea Owe, forthcoming. “Artificial intelligence needs environmental ethics”. *Ethics, Policy, & Environment*.

Baum, Seth D., 2019. “The challenge of analyzing global catastrophic risks”. *Decision Analysis Today*, vol. 38, no. 1 (July), pages 20-24.

Response Articles

Baum, Seth D., 2020 “Quantifying the probability of existential catastrophe: A reply to Beard et al.”. *Futures*, vol. 123 (October), article 102608, doi 10.1016/j.futures.2020.102608.

Baum, Seth D., 2015. “Winter-safe deterrence as a practical contribution to reducing nuclear winter risk: A reply”. *Contemporary Security Policy*, vol. 36, no. 2 (August), pages 387-397.

Baum, Seth D., Jacob D. Haqq-Misra, and Chris Karmosky, 2012. “Climate change: Evidence of human causes and arguments for emissions reduction”. *Science and Engineering Ethics*, vol. 18, no. 2 (June), pages 393-410.

Baum, Seth D., 2008. “Better to exist: A reply to Benatar”. *Journal of Medical Ethics*, vol. 34, no. 12 (December), pages 875-876.

Baum, Seth, 2006. “Response to Quality science teachers: Essential to America’s future”. *The Science Teacher*, December, pages 8-9. Reprinted in *Journal of College Science Teaching*, vol. 36, no. 4 (January/February), 2007, pages 6-7.

Book & Film Reviews

Baum, Seth D., 2022. “Book review: *The Precipice: Existential Risk and the Future of Humanity*”. *Risk Analysis*, vol. 42, no. 9 (September), pages 2122-2124.

Baum, Seth D., 2020. “Deep learning and the sociology of human-level artificial intelligence”. *Metascience*, vol. 29, no. 2, pages 313-317.

Baum, Seth D., 2019. “Preparing for the unthinkable”. *Science*, vol. 364, no. 6459 (September 20), page 1254.

Baum, Seth D. “Film Review: *Snowpiercer*”. *Journal of Sustainability Education*, vol. 7, December issue (online).

Baum, Seth D., 2014. “Book review: *Only One Chance: How Environmental Pollution Impairs Brain Development – and How to Protect the Brains of the Next Generation*”. *Environmental Science & Policy*, vol. 42 (October), pages 197-199.

Baum, Seth D., 2014. “Film review: *Transcendence*”. *Journal of Evolution and Technology*, vol. 24, no. 2 (September), pages 79-84.

Baum, Seth D. and James E. Thatcher, 2010. “Film review: *Inception*”. *Journal of Evolution and Technology*, vol. 21, no. 1 (July), pages 62-66.

Baum, Seth D., 2009. “Film review: *District 9*”. *Journal of Evolution and Technology*, vol. 20, no. 2 (December), pages 86-89.

Baum, Seth D., 2009. “Book review: *Global Catastrophic Risks*”. *Risk Analysis*, vol. 29, no. 1 (January), pages 155-156.

PUBLICATIONS – POPULAR

Baum, Seth, 2022. “New York’s housing plans must address affordability—& climate change”. *City Limits*, 29 December.

Baum, Seth, 2022. “Doing better on climate change”. *Effective Altruism Forum*, 7 October.

Baum, Seth, 2022. “Early reflections and resources on the Russian invasion of Ukraine”. *Effective Altruism Forum*, 18 March.

Baum, Seth, 2019. “How to evaluate the risk of nuclear war”. *BBC Future*, 10 March.

Baum, Seth, and Jonas Schuett, 2021. “The case for long-term corporate governance of AI”. *Effective Altruism Forum*, 3 November.

Baum, Seth, 2019. “Why catastrophes can change the course of humanity”. *BBC Future*, 9 April.

Baum, Seth D., 2018. “Preventing an AI apocalypse”. *Project Syndicate*, 16 May. Reprinted in *The New Times* (Rwanda), *Khaleej Times* (United Arab Emirates), World Economic Forum, MarketWatch, *Japan Times*, *Asia Times*, and Médias24 (Morocco), *Times of Oman*, *Khmer Times*, *Taipei Times*, *Dagens Perspektiv* (Oslo).

Baum, Seth D., 2017. “Assessing global catastrophic risk”. In Helen Caldicott (Editor), *Sleepwalking to Armageddon: The Threat of Nuclear Annihilation*. New York: New Press, pages 3-10.

Baum, Seth, 2016. “What Trump means for global catastrophic risk”. *Bulletin of the Atomic Scientists*, 9 December.

Baum, Seth, 2016. “Should we let uploaded brains take over the world?”. *Scientific American Blogs*, 18 October.

Baum, Seth, 2016. “Tackling near and far AI threats at once”. *Bulletin of the Atomic Scientists*, 6 October.

Baum, Seth, 2015. “Japan should restart more nuclear power plants”. *Bulletin of the Atomic Scientists*, 20 October.

Baum, Seth, 2015. “Antinuclear Austria should lead the way on nuclear power” *Scientific American Blogs*, 29 September.

Baum, Seth, 2015. “Breaking down the risk of nuclear deterrence failure”. *Bulletin of the Atomic Scientists*, 27 July.

Baum, Seth and Trevor White, 2015. “When robots kill”. *The Guardian Political Science blog*, 23 June.

Baum, Seth, 2015. “Should nuclear devices be used to stop asteroids?”. *Bulletin of the Atomic Scientists*, 17 June.

Baum, Seth, 2015. “Is stratospheric geoengineering worth the risk?”. *Bulletin of the Atomic Scientists*, 5 June.

Baum, Seth, 2015. “The risk of nuclear winter”. *Public Interest Reports*, vol. 68, no. 2.

Baum, Seth, 2015. “On winter-safe deterrence and interdisciplinary research”. *Bulletin of the Atomic Scientists*, roundtable discussion “The winter-safe deterrence debate”, 2 April.

Baum, Seth, 2015. “On winter-safe deterrence and biological weapons”. *Bulletin of the Atomic Scientists*, roundtable discussion “The winter-safe deterrence debate”, 20 March.

Baum, Seth, 2015. “Getting smart about global catastrophes”. *Medium*, special section “7 Days of Genius”, 16 March.

Baum, Seth, 2015. “Deterrence, without nuclear winter”. *Bulletin of the Atomic Scientists*, 9 March.

Baum, Seth, 2015. “What are the best ways to prevent global catastrophe?”. *Institute for Ethics and Emerging Technologies*, 26 February.

Baum, Seth, 2015. “Stopping killer robots and other future threats”. *Bulletin of the Atomic Scientists*, 22 February.

Baum, Seth, 2015. “Support the Austria Pledge”. *Bulletin of the Atomic Scientists*, 27 January.

Baum, Seth, 2014. “Nuclear war, the black swan we can never see”. *Bulletin of the Atomic Scientists*, 21 November.

Baum, Seth, 2014. “The lesson of Lake Toba”. *Bulletin of the Atomic Scientists*, 21 October.

Baum, Seth, 2014. “Planetary boundaries and global catastrophic risk”. *Institute for Ethics and Emerging Technologies*, 21 October.

Baum, Seth, 2014. “Best and worst case scenarios for Ukraine crisis: World peace and nuclear war”. *The Huffington Post*, 7 March.

Baum, Seth, 2013. “Our Final Invention: Is AI the defining issue for humanity?”. *Scientific American Blogs*, 11 October. Reprinted in *Yahoo News*, *The Huffington Post*, and *Medium*.

Baum, Seth, 2013. “Taming the gigaton gorilla: Using Syria diplomacy to help avoid U.S.-Russia nuclear war”. *The Huffington Post*, 15 September. Reprinted in *Medium*.

Baum, Seth, 2013. “Making the universe a better place”. *Current Exchange/Technophilic Magazine*, Spring, pages 22-23.

Baum, Seth and Grant Wilson, 2013. “How to create an international treaty for emerging technologies”. *Institute for Ethics and Emerging Technologies*, 21 February.

Baum, Seth, 2013. “When global catastrophes collide: The climate engineering double catastrophe.” *Scientific American Blogs*, 6 February 2013. Reprinted in *Yahoo News* and *The Huffington Post*.

Baum, Seth, 2013. “Seven reasons for integrated emerging technologies governance”. *Institute for Ethics and Emerging Technologies*, 23 January.

Baum, Seth, 2012. “Hurricane Sandy hints at the perils of global catastrophe”. *Scientific American Blogs*, 6 November 2012. Reprinted in *Yahoo News* and *The Huffington Post*.

Baum, Seth, 2012. “Dedicated bus corridors could help get New York moving again”. *The Huffington Post*, 31 October.

Baum, Seth, 2012. “Earth day, conspiracy and world government”. *The Huffington Post*, 22 April.

Goertzel, Ben, Seth Baum, and Ted Goertzel, 2010. “How long till human-level AI? What do the experts say?”. *h+ Magazine*, February 5.

Haqq-Misra, Jacob D. and Seth D. Baum, 2010. “Where have all the aliens gone? Sustainability may explain the absence of extraterrestrials”. *Sky & Telescope*, vol. 119, no. 3 (March), page 86.

Baum, Seth, 2009. “Collaboration is key to sustainability”. *Centre Daily Times*, December 1, page A6.

Baum, Seth, 2009. “Senate should pass the American Clean Energy and Security Act”. *Odessa American*, July 7; *Asheville Citizen-Times*, July 13. Different version published as “Senate should pass Clean Energy and Security act”. *Centre Daily Times*, July 18, page A6.

Baum, Seth, 2008. “Reducing catastrophic risk through integrative assessment”. *Hawaii Reporter*, August 25; *Daily Camera* (Boulder, CO), September 2.

Baum, Seth, 2002. “Form more partnerships between our city students and professionals”. *Rochester Democrat and Chronicle*, September 23, page 7A.

12 publications in *FutureChallenges.org*, 2010-2012.

11 publications in *University of Rochester Campus Times*, 1999-2009.

18 publications in *Whats Up Magazine* (Boston, MA), 2004-2007.

PUBLICATIONS – STUDENT

The following are articles published by students of mine as part of courses I taught.

Geography 30, Summer 2009

Ferry, Christina. “Cut meat consumption”. *Centre Daily Times*, June 24, 2009.

Roseman, Alexis. “Help the environment and yourself - don't drive”. *Bucks County Courier Times*, July 3, 2009.

Geography 30, Fall 2009

46 students published 49 op-ed articles and letters to the editor of publications including *Bucks County Courier Times*, *Butler Eagle*, *Centre Daily Times*, *Clarion News*, *Erie Times News*, *Hunterdon County Democrat*, *Pittsburgh Post Gazette*, *Pottstown Mercury*, *Voices of Central PA*, *Wellsboro Gazette*, and *Williamsport Guardian*.

Geography 30-Web, Spring 2011

16 students published letters to the editor of publications including *Allentown Morning Call*, *Atlantic City Press*, *Centre Daily Times*, *New Castle News*, *Pittsburgh Post Gazette*, *Pocono Record*, *Wilkes-Barre Times Leader*, and *Williamsport Sun-Gazette*.

PROFESSIONAL PRESENTATIONS

Invited Presentations

Baum, Seth, 2022. “Nonhuman-compatible AI”. Seminar delivered remotely to the UC Berkeley Center for Human-Compatible AI. 23 February, Berkeley and online.

Baum, Seth, 2021. “The challenges of addressing rare events and how to overcome them”. Presentation to a workshop *Anticipating Rare Events of Major Significance* hosted by the US National Academies of Sciences, Engineering, and Medicine. December 17 and 21, online.

Baum, Seth, 2021. “Setting the stage for future AI governance”. Seminar delivered remotely to the Legal Priorities Project. 16 July, online.

Baum, Seth, 2021. “Setting the stage for future AI governance”. Talk delivered remotely to the 2021 CHAI Virtual Workshop, Center for Human-Compatible Artificial Intelligence, UC Berkeley. 8 June, Berkeley and online.

Baum, Seth, 2021. “Risk analysis and artificial general intelligence”. Seminar delivered remotely to the 17th Meeting of Japanese Society for Artificial Intelligence Special Interest Group on Artificial General Intelligence. 24-25 February, Japan and online.

Baum, Seth, 2020. “Asteroids as a case study in global catastrophic risk”. Seminar delivered remotely to the Duke Center on Risk. 6 November, Durham, NC and online.

Baum, Seth, 2020. “Recent work at the Global Catastrophic Risk Institute”. Seminar delivered remotely to the Cambridge University Centre for the Study of Existential Risk. 21 September, Cambridge, UK and online.

Baum, Seth, 2019. “Intermediate-term artificial intelligence & society”. Seminar hosted by UC Berkeley Center for Human-Compatible AI. 26 June, Berkeley.

Baum, Seth, 2018. “The social science of artificial intelligence”. Seminar hosted by UC Berkeley Center for Human-Compatible AI. 7 November, Berkeley and online.

Baum, Seth, 2018. “A model for the risk of nuclear war”. *Workshop on Quantifying Global Catastrophic Risks*, hosted by the Garrick Institute for the Risk Sciences at University of California, Los Angeles. 16 September, Los Angeles.

Baum, Seth, 2018. “AI risk, ethics, social science, and policy”. Seminar hosted by UC Berkeley Center for Human-Compatible AI. 11 June, Berkeley.

Baum, Seth, 2018. “Risk analysis of global catastrophes”. *Extremes Collider Workshop*, hosted by the Earth Lab at the University of Colorado Boulder. 3 May, Boulder, CO and online.

Baum, Seth, 2018. “Making the most of limited evidence in global catastrophic risk analysis”. *Cambridge Conference on Catastrophic Risk*, Cambridge University. 17 April, Cambridge, UK.

Baum, Seth, 2018. “The effect of artificial intelligence on strategic stability”. *Workshop on Dangerous or Disruptive Technologies to Strategic Nuclear Stability*, hosted by the Federation of American Scientists. 15 February, Washington, DC.

Baum, Seth, 2017. “Long-term trajectories of human civilization”. *Workshop on Existential Risk to Humanity*, Gothenburg Chair Programme for Advanced Studies, Chalmers University of Technology and University of Gothenburg. 9 September, Gothenburg, Sweden.

Baum, Seth, 2017. “In search of the biggest risk reduction opportunities”. *Workshop on Existential Risk to Humanity*, Gothenburg Chair Programme for Advanced Studies, Chalmers University of Technology and University of Gothenburg. 8 September, Gothenburg, Sweden.

Baum, Seth, 2017. “Integrated assessment of global catastrophic risk and artificial intelligence”. Seminar at Cambridge University Centre for the Study of Existential Risk. 28 June, Cambridge, UK.

Baum, Seth, 2017. “Integrated assessment of global catastrophic risk”. *Colloquium on Catastrophic and Existential Risk*. Event hosted by the Garrick Institute for the Risk Sciences at University of California, Los Angeles. 27 March, Los Angeles.

Baum, Seth, 2015. “How bad could it get? Risk analysis of nuclear winter”. *2015 Nuclear Non-Proliferation Treaty Review Conference*. United Nations Office for Disarmament Affairs. Part of a session “Catastrophic global risks, nuclear weapons, and human survival” hosted by People for Nuclear Disarmament. 6 May, New York City.

Baum, Seth, 2014. “What is the risk of nuclear war?”. *Vienna Conference on the Humanitarian Impact of Nuclear Weapons*. Conference hosted by the Austrian Federal Ministry for Europe, Integration and Foreign Affairs. 8-9 December, Vienna.

Baum, Seth, 2014. “Deterrence theory and global catastrophic risk reduction”. *Future of Humanity Institute Seminars*. Oxford University. 13 October, Oxford.

Baum, Seth, 2014. “Nuclear war risk: Prior estimations and methodology”. *Risk Estimates for Global Challenges: Nuclear War*. Workshop sponsored by Global Challenges Foundation and hosted by Future of Humanity Institute, Oxford University. 9 October, Oxford.

Baum, Seth, 2014. “The risk of inadvertent nuclear war between the United States and Russia”. *Third Session of the Preparatory Committee for the 2015 Nuclear Non-Proliferation Treaty Review Conference*. United Nations Office for Disarmament Affairs. Part of a session “Accidental apocalypse: Probabilistic approaches to accidental nuclear war and human survival” hosted by People for Nuclear Disarmament. 1 May, New York City.

Baum, Seth, 2014. “Nuclear winter and the search for safer deterrence”. *United Nations Security Council “P5” Permanent Members*, experts meeting hosted by the United States. 15 April, New York City.

Baum, Seth, 2014. “The convergence of anthropocentric and ecocentric values towards global catastrophic risk reduction”. *The Futurability Initiatives International Symposium 2014: Humanity in nature: What ought it be?* Symposium hosted by Research Institute for Humanity and Nature. 24 March, Tokyo.

Baum, Seth, 2014. “The great downside dilemma for risky emerging technologies”. *Emerging Technologies and the Future of Humanity*. Event hosted by Kungliga Vetenskapsakademien (Royal Swedish Academy of Sciences). 17 March, Stockholm.

Baum, Seth, 2014. “Semantics of the biggest risks”. *Global Challenges: 2013 Report*. Workshop hosted by the University of Oxford Future of Humanity Institute in conjunction with the Global Challenges Foundation. 14 January, Oxford and online.

Baum, Seth, and Inés García, 2013. “Small World premier: Art-science collaboration for fictional narrative outreach videos”. *Center for Research on Environmental Decisions Weekly Meeting*. Columbia University. 1 October, New York City.

Baum, Seth, 2012. “Space-time discounting and global catastrophic risk”. Private seminar at Nomura Research Institute. 12 July, Tokyo.

Baum, Seth, 2012. “Global catastrophic risk reduction as a civilization priority”. *Futurability Seminar Series*. Research Institute for Humanity and Nature. 27 June, Kyoto.

Baum, Seth, 2010. "Space-time discounting for climate change policy". *Center for Research on Environmental Decisions Weekly Meeting*. Columbia University. 23 September, New York City.

Baum, Seth, 2010. "Climate economics since the Stern Review". *Earth System Science Center Brown Bag Seminar Series*. Pennsylvania State University. 17 March, State College, PA.

Conference Session Chairships

Baum, Seth and Ronald Dyer, 2020. "Career path: Risk management". *Society for Risk Analysis 2020 Annual Meeting*, 13-17 December, online.

Wilson, Robyn, Patrick Gurian, and Seth Baum, 2020. "Doing inter- and transdisciplinary research". *Society for Risk Analysis 2020 Annual Meeting*, 13-17 December, online.

Chakraborty, Sweta and Seth Baum, 2020. "Transitioning from academia to consulting". *Society for Risk Analysis 2020 Annual Meeting*, 13-17 December, online.

Baum, Seth, 2017. "Global catastrophic risk assessment, policy and communication". *Society for Risk Analysis 2017 Annual Meeting*, 10-14 December, Arlington, VA.

Baum, Seth and Anthony Barrett, 2015. "Global catastrophic risks". *Society for Risk Analysis 2015 Annual Meeting*, 6-10 December, Arlington, VA.

Baum, Seth, 2013. "Global risk governance". *Society for Risk Analysis 2013 Annual Meeting*, 8-11 December, Baltimore.

Baum, Seth, 2013 (invited). "Potential for megadisasters". *American Geophysical Union Science Policy Conference*, 24-26 June, Washington, DC.

Baum, Seth, 2012. "Technocracy and democracy in risk governance". *Society for Risk Analysis 2012 Annual Meeting*, 9-12 December, San Francisco.

Baum, Seth, 2012. "Global catastrophic risk". *World Congress on Risk 2012*, 18-20 July, Sydney.

Baum, Seth, 2011. "Catastrophic climate change". *Society for Risk Analysis 2011 Annual Meeting*, December, 4-7 Charleston, SC.

Baum, Seth, 2011. "Happenings at the Center for Research on Environmental Decisions". *Nature, Ecology, and Society Colloquium*, 10-11 March, New York City.

Baum, Seth, 2010. "Methodologies for global catastrophic risk assessment". *Society for Risk Analysis 2010 Annual Meeting*, 5-8 December, Salt Lake City.

Baum, Seth, 2010. "Incorporating public scholarship into an academic career". *no)Boundaries 2010 Graduate Student Conference*, 20-21 March, State College, PA.

Baum, Seth, 2009. “Using integrated assessment modeling in climate change mitigation policy”. *United States Society for Ecological Economics Fifth Biennial Conference*, 31 May-3 June, Washington, DC.

Baum, Seth, 2009. “Young scholar perspectives on human dimensions of global change research: Advancing the role of research in environmental decision making”. *Association of American Geographers 2009 Annual Meeting*, 22-27 April, Las Vegas.

Conference Oral Presentations

Baum, Seth, 2019. “Global catastrophic risk decision analysis”. *Society for Risk Analysis 2017 Annual Meeting*, 8-12 December, Arlington, VA.

Baum, Seth, 2019. “Accounting for violent conflict risk in planetary defense decisions”. *6th IAA Planetary Defense Conference*, 29 April-3 May, College Park, MD.

Baum, Seth, 2017. “Quantifying long-term severity”. *Society for Risk Analysis 2017 Annual Meeting*, 10-14 December, Arlington, VA.

Anthony Barrett and Seth Baum, 2016. “Technology forecasting for analyzing future global catastrophic risks”. *Society for Risk Analysis 2016 Annual Meeting*, 11-15 December, San Diego.

Baum, Seth and Anthony Barrett, 2015. “Risk and policy analysis of nuclear war”. *Society for Risk Analysis 2015 Annual Meeting*, 6-10 December, Arlington, VA.

Anthony Barrett and Seth Baum, 2015. “Analyzing long term risks of artificial intelligence catastrophe”. *Society for Risk Analysis 2015 Annual Meeting*, 6-10 December, Arlington, VA.

Baum, Seth, 2015. “Transdisciplinary synthesis in global catastrophic risk research”. *Poles Apart, Melting Together: Science & the Humanities Confront the Anthropocene* (hosted by Boston University Center for Interdisciplinary Teaching & Learning), 27 June, Boston.

Baum, Seth, 2013. “The resilience of human civilization in the face of global catastrophes”. *Society for Risk Analysis 2013 Annual Meeting*, 8-11 December, Baltimore.

Baum, Seth, 2013. “Building an international think tank with remote collaboration”. *Climate-Friendly Climate Research Conference*, 11-15 November, online (hosted by Klimaforschungsnetzwerk Österreich/Climate Change Centre Austria).

Baum, Seth, and Grant Wilson, 2013. “The ethics of global catastrophic risk from dual-use bioengineering”. *7th Annual International Conference on Ethical Issues In Biomedical Engineering*, 20-21 April, Brooklyn.

Baum, Seth, 2012. “Voice and democraticity in electoral and technocratic environmental decision procedures”. *Society for Risk Analysis 2012 Annual Meeting*, 9-12 December, San Francisco.

Baum, Seth, 2012. "Transdisciplinarity and transprofessionalism for global catastrophic risk". *World Congress on Risk 2012*, 18-20 July, Sydney.

García, Inés and Seth Baum, 2012. "Arts-academia collaborations for inspirational environmental comedy". *Nature, Ecology, and Society Colloquium*, 2 March, New York City.

Baum, Seth, Kaitlin Butler, and Peter Howe, 2012. "Perceptions of mitigation behaviors: Is food choice overlooked?". *Association of American Geographers 2012 Annual Meeting*, 24-28 February, New York City.

Baum, Seth, 2011. "Communicating the importance of global catastrophic risk". *Society for Risk Analysis 2011 Annual Meeting*, 4-7 December, Charleston, SC.

Baum, Seth, 2011. "Democracy, technocracy and climate change mitigation policy". *Association of American Geographers 2011 Annual Meeting*, 12-16 April, Seattle.

Baum, Seth, 2011. "A new cultural outlook on climate change". *Nature, Ecology, and Society Colloquium*, 10-11 March, New York City.

Baum, Seth, 2010. "The moral psychology of environmental conflict". *Middle States Division of the Association of American Geographers 2010 Annual Meeting*, 22-23 October, West Point, NY.

Baum, Seth, 2010. "Space-time discounting, global catastrophic risk, and climate change economics". *Society for Risk Analysis 2010 Annual Meeting*, 5-8 December, Salt Lake City.

Baum, Seth, 2010. "Space-time discounting for climate change policy". *Technology Management and Policy Graduate Consortium 2010 Meeting*, 27-29 June, Cambridge, UK.

Baum, Seth, Destiny Aman, and Andrei Israel, 2010. "Promoting civic engagement through student projects in introductory environmental geography courses". *Association of American Geographers 2010 Annual Meeting*, 14-18 April, Washington, DC.

Baum, Seth, 2009. "Artificial intelligence and risk: What should we believe?". *Society for Risk Analysis 2009 Annual Meeting*, 6-9 December, Baltimore.

Baum, Seth, 2009. "Discounting and beyond: Interpreting the ethics in climate change economics". *United States Society for Ecological Economics Fifth Biennial Conference*, 31 May-3 June, Washington, DC.

Baum, Seth, 2009. "Integrating ethics into human dimensions of global change research". *Association of American Geographers 2009 Annual Meeting*, 22-27 April, Las Vegas.

Baum, Seth, 2009. "An expert elicitation survey on artificial general intelligence". *Second Conference on Artificial General Intelligence*, 6-9 March, Arlington, VA.

Baum, Seth, 2009. "Ethics, geopolitics, and catastrophic climate change". *no)Boundaries 2009 Graduate Student Conference*, 28 February-1 March, State College, PA.

Baum, Seth, 2008. “Catastrophic climate change scenarios”. *Society for Risk Analysis 2008 Annual Meeting*, 7-10 December, Boston.

Baum, Seth, 2008. “An expanded approach to discounting: Theory and psychology”. *Climate Decision Making Center Annual Meeting and Student Workshop*, 19-22 May, Pittsburgh.

Baum, Seth and Vanessa Schweizer, 2008. “Efforts at general public education: Where does the science end and advocacy start?”. *Climate Decision Making Center Annual Meeting and Student Workshop*, 19-22 May, Pittsburgh.

Baum, Seth, 2008. “Discounting explained and refined”. *Association of American Geographers 2008 Annual Meeting*, 15-19 April, Boston.

Baum, Seth and Steve Fernandez, 2008. “Exploring connections between science and society through nuclear physics”. *National Science Teachers Association 2008 National Conference*, 27-30 March, Boston.

Baum, Seth, Angélica Torres, Charity Cochran-Murphy, and David Romeo, 2008. “Meaningful K12-university partnerships: Insights from GK12 programs”. *National Science Teachers Association 2008 National Conference*, March, Boston.

Baum, Seth, 2007. “Putting Ramsey model-based climate change assessments in perspective”. *United Nations Framework Convention on Climate Change 13th Conference of Parties*, 3-15 December, Bali, Indonesia. *Note: I was unable to attend; the paper was presented on my behalf by the Rock Ethics Institute.*

Conference Panel Discussions

Nathan, Christopher, 2021. “Panel 1”. *The Future of Catastrophic Risk*, a seminar hosted by the University of Warwick. With panelists Simon Caney, Seth Baum, and Pia-Johanna Schweizer, 9 December, online.

Goertzel, Ben, 2020. “Infusing AGI with compassion”. *AGI-20 Virtual Conference, 13th Conference on Artificial General Intelligence*. With panelists Seth Baum, Julia Mossbridge, and Wendell Wallach. 28 June, online.

Nathan, Christopher, 2019. “Cross-cutting lessons about risk in emerging technology”. *Responsible Innovation, Risk, and Biotechnology*, a workshop at the University of Warwick Integrative Synthetic Biology Centre. With panelists Seth Baum (via remote connection) and Christopher Nathan. 6 June, Warwick and online.

Felten, Ed, 2019. “What (if anything) makes environment and agriculture unique in the AI space?”. With panelists Seth Baum, Irina Brass, Joanna Bryson, and Michael Veale. 12 January, Princeton.

Aguirre, Anthony, 2019. “Governance of artificial general intelligence emergence and early use”. With panelists Seth Baum, Miles Brundage, Peter Eckersley, and Helen Toner. 6 January, Río Grande, Puerto Rico.

Hughes, James, 2015. “The World in 2025, 2035, and 2045”. *2015 World Technology Summit and Awards*. With panelists Seth Baum, Melanie Swan and David Biello. 20 November, New York City.

Phillips, Lisa and Dana Whitco, 2013. “Better than barter: Artists and scientists redefine collaboration, mentorship and community”. *NoPassport 2013 Conference*. With panelists Steve Cosson, Erin Sherman, Seth Baum, Inés García, Nicole Davi, and Jeremy Pickard. 1 March, New York City.

Bedford, Dan, Lesley-Ann Dupigny-Giroux, and John Harrington, 2012. “Climate change literacy”. *Association of American Geographers 2012 Annual Meeting*. With panelists Anthony Leiserowitz, Seth Baum, Gavin Schmidt, Bruce Moravchik, and Lesley-Ann Dupigny-Giroux. 24-28 February, New York City.

Conference Poster Presentations

Certan, Uliana and Seth Baum, 2021. “Military artificial intelligence and global catastrophic risk”. *Society for Risk Analysis 2021 Annual Meeting*, 5-9 December, online.

Gouiran, Manon, Dakota Norris, and Seth Baum. “Moral circle expansion as a means of advancing management of global catastrophic risks”. *Society for Risk Analysis 2021 Annual Meeting*, 5-9 December, online.

Martin, Aaron and Seth Baum, 2021. “Policy attention to extreme catastrophic risk: The curious case of near-Earth objects”. *Society for Risk Analysis 2021 Annual Meeting*, 5-9 December, online.

Haqq-Misra, Jacob, Michael Busch, Sanjoy Som, and Seth Baum, 2012. “The benefits and harms of transmitting into space”. *Astrobiology Science Conference*, 16-20 April, Atlanta. *Note: I was unable to attend; the poster was presented on my behalf by Jacob Haqq-Misra.*

Butler, Kaitlin, Seth Baum, and Peter Howe, 2011. “Perceptions of mitigation behaviors: Is food choice overlooked?”. *Behavior, Energy and Climate Change 2011 Conference*, 30 November-2 December, Washington, DC.

Baum, Seth, 2010. “Space-time discounting in climate change adaptation”. *Worldwide Universities Network Adapting to Climate Change Poster Session*, 22-25 May, State College, PA.

Baum, Seth, 2008. “Welfare discounting: Ethics and implications”. *Climate Decision Making Center Annual Meeting and Student Workshop*, 19-22 May, Pittsburgh.

Baum, Seth, 2007. “Utilitarianism: A transdisciplinary approach”. *United States Society for Ecological Economics Fourth Biennial Conference*, 23-27 June, New York City.

Baum, Seth and Claire Duggan, 2007. “Reflections on education outreach”. *Center for Subsurface Sensing and Imaging Systems Year 7 National Science Foundation Site Visit*, 19-20 April, Boston.

Silevitch, Michael, Claire Duggan, Seth Baum, Ann McDonald, and Jay Laird, 2007. “ROVERS: Remote Operated Volatile Explosives Retrieval Systems: An educational game collaboration between the Bernard M. Gordon Center for SubSurface Imaging Systems, the Northeastern University Multimedia Studies Program, and Metaversal Studios, Inc.”. *Center for Subsurface Sensing and Imaging Systems Year 7 National Science Foundation Site Visit*, 19-20 April, Boston.

Baum, Seth, Michael Byrne, Emily Hart, Jason Kessel, Marielle Postavia-Davignon, Nicholas Yang, Claire Duggan and Thomas Gilbert, 2007. “Northeastern University: Experience, believe, achieve”. *National Science Foundation GK-12 Program Annual Conference*, 9-11 March, Washington, DC. *Note: I designed the poster but was unable to attend.*

Baum, Seth and Carey Rappaport, 2006. “Introducing the NUFDTD software package”. *Center for Subsurface Sensing and Imaging Systems 2006 Research and Industrial Collaboration Conference*, 4 October, Boston.

Baum, Seth, 2006. “Modeling ground penetrating radar while teaching high school science”. *Center for Subsurface Sensing and Imaging Systems Year 6 National Science Foundation Site Visit*, 4-6 April, Boston.

Baum, Seth, Lara Jabr, Anna Myers, Marielle Postavia-Davignon, Jay Rushford, Claire Duggan and Thomas Gilbert, 2006. “Northeastern University: Experience, believe, achieve”. *National Science Foundation GK-12 Program Annual Conference*, March, Washington, DC.

Baum, Seth, Stephen Wong, Dan Mahr, Carey Rappaport, Claire Duggan, and Grady McClinton, 2005. “Developing FDTD code while teaching high school science”. *Center for Subsurface Sensing and Imaging Systems 2005 Research and Industrial Collaboration Conference*, 6-7 October, Boston.

- Awarded Best Poster, Education and Outreach Program Category

Baum, Seth, Jay Laird, Sam Christy, Michael Silevitch, Claire Duggan, and Ann McDonald, 2005. “Subsurface imaging-themed computer games and machine activities”. *Center for Subsurface Sensing and Imaging Systems 2005 Research and Industrial Collaboration Conference*, 6-7 October, Boston.

Baum, Seth, Robin Canale, Ryda Chea, Jiaan Hyland-Babaie, Carey Rappaport, Claire Duggan, and Paul Muller, 2005. “Modeling ground penetrating radar while teaching high school science”. *Center for Subsurface Sensing and Imaging Systems Year 5 National Science Foundation Site Visit*, 7-8 April, Boston.

PUBLIC SPEAKING

Revkin, Andrew, Seth Baum, Carl Bergstrom, and Jim Moffitt, 2022. “Can thriving online include thriving on Mastodon?” *Columbia Climate School*, online.

Baum, Seth, 2022. “An overview of global catastrophic risk”. *Swiss Existential Risk Initiative (CHERI) 2022 Summer Research Program Opening Event*, 5 July, online.

Baum, Seth, 2022. “Limits of the value alignment paradigm”. *Effective Altruism UC Berkeley*, 13 April, online.

Baum, Seth, 2021. “AI governance and global catastrophic risk”. *Effective Altruism New York City*, 12 August, online.

Baum, Seth, and four other panelists, 2021. “The Biden administration and the long-term future”. *Effective Altruism DC*. 21 February, online.

Baum, Seth, 2019. “An introduction to global catastrophic risks”. *Effective Altruism Philadelphia and Penn Effective Altruism*. 27 October, Philadelphia.

de Neufville, Robert and Seth Baum, 2019. “How to predict the future (a little more accurately)”. *Effective Altruism Global 2018: San Francisco*. 22 June, San Francisco.

Baum, Seth, 2019. “Evaluating future nanotechnology”. *Effective Altruism DC*. 28 April, Rosslyn, VA.

Baum, Seth, 2018. “How to kick asteroids”. *Nerd Nite NYC*. 8 December, Brooklyn.

Baum, Seth, 2018. “Is molecular nanotechnology a good thing?”. *Envision Conference*. 1 December, Princeton.

Baum, Seth, 2018. “The social science of achieving positive long-term AI outcomes”. *Envision Conference*. 1 December, Princeton.

Baum, Seth, 2018. “Introduction to artificial intelligence research”. *Tech2025*. 16 August, New York City.

Baum, Seth, 2018. “An evening with the Global Catastrophic Risk Institute”. *Effective Altruism NYC*. 9 August, New York City.

Baum, Seth, 2018. “Nuclear war risk plot twists”. *EAGx Australia*. 15 July, Melbourne (via remote/online connection).

Baum, Seth, 2018. “Reconciling effective altruism and international security perspectives”. *EA Global 2018: San Francisco*. 10 June, San Francisco.

Belfield, Haydn, Gregory Lewis, and Seth Baum, 2018. “Civilizational collapse”. *EA Global 2018: San Francisco*. 9 June, San Francisco.

Leung, Jade and Seth Baum, 2018. “Do existing institutions have a role to play in AI Strategy?”. *EA Global 2018: San Francisco*. 9 June, San Francisco.

Baum, Seth, 2017. “Future technology extreme risks and benefits”. *Envision Conference*. 2 December, Princeton.

Baum, Seth, 2017. “How to (and how not to) avoid AI apocalypse”. *Tech2025*. 16 November, Brooklyn.

Baum, Seth, 2017. “You might be killed by zombies, ghosts, witches, demons, goblins, centaurs, mermaids, and/or tire explosions”. *Nerd Nite NYC*. 13 October, Brooklyn.
<https://www.youtube.com/watch?v=FoPD68PHWa0>

Baum, Seth, 2017. “How to (and how not to) avoid AI apocalypse”. *Tech2025*. 11 July, New York City.

Baum, Seth, 2016. “Future technology extreme risks and benefits”. *Envision Conference*. 3 December, Princeton.

Baum, Seth, 2016. “Killer waves: Where to surf during nuclear war”. *Nerd Nite NYC*. 19 November, Brooklyn.

Baum, Seth, 2016. “Global catastrophe and the future of consciousness”. *YHouse YCafé Consciousness Club*. 9 November, New York City.

Baum, Seth, 2016. “Scary weapons”. *Story Collider*. 18 October, Brooklyn.

Baum, Seth and Konstantinos Karachalios, 2016. “What’s the Big Idea?”. Panel discussion at the Soho House. 14 March, New York City.

Baum, Seth, 2015. “Please hold your farts until after the nuclear war”. *Nerd Nite NYC*. 10 April, Brooklyn.

Baum, Seth, 2015. “Ask me anything”. Online discussion at the Effective Altruism Forum website. 3 March 2015, online.

Sachs, Jeffrey, Seth Baum, and Max Tegmark, 2015. “The Future of Life on Earth”. Panel discussion at the 92nd Street Young Men’s and Young Women’s Hebrew Association as part of their 7 Days of Genius festival. 1 March 2015, New York City.

Baum, Seth, 2015. “The catastrophic risk of nuclear war”. *The Dynamics of Possible Nuclear Extinction*. Symposium hosted by the Helen Caldicott Foundation. 28 February-1 March, New York City.

Baum, Seth, 2014. “Navigating the high-stakes turbulence to our future” (keynote address). *Global Existential Risks & Radical Futures*. Conference hosted by Transhuman Visions. 14 June, Piedmont, CA.

Baum, Seth, and others, 2013. Career Panels and Networking Reception, University of Rochester Meliora Weekend, 10-13 October, Rochester, NY.

Baum, Seth, 2013. (No talk title). *University of Rochester Career Center Food for Thought Series*, 3 April, Rochester, NY (delivered via Skype).

Baum, Seth, 2011. “Aliens could take over the world, but robots are more likely to”. *Nerd Nite NYC*. 14 January, Brooklyn.

Baum, Seth, 2006. “Explorations in the use of graph theory for the optimization of transit systems”. *Nerd Nite Boston*. 14 January, Jamaica Plain.