

Stephanie Dick

Assistant Professor of History and Sociology of Science
University of Pennsylvania
Suite 303 Claudia Cohen Hall
Philadelphia, PA 19104-6304
Email: sadick@sas.upenn.edu
Phone: 617-875-9453
Website: <http://www.sas.upenn.edu/~sadick/>

Academic Positions

- 2018 **Max Planck Institute for the History of Science**
Visiting Scholar (May)
- 2017- **Department of History and Sociology of Science, University of Pennsylvania**
Assistant Professor
- 2014-17 **Society of Fellows, Harvard University**
Junior Fellow

Education

- 2015 **Harvard University**
PhD in History of Science
Dissertation: *After Math: (Re)configuring Minds, Proof, and Computing in the Postwar United States*
- 2013 **University of Chicago**
Exchange Scholar with the Committee on Conceptual and Historical Studies of Science
- 2008 **The University of Toronto**
MA in History and Philosophy of Science and Technology
- 2007 **The University of King's College and Dalhousie University**
BA First Class Combined Honours, Departments of History of Science and Technology and Philosophy

Honors and Awards

- 2016-17 *William F. Milton Fund Grant. Harvard University.*
- 2012-15 *Alan Turing Centenary Fellowship in the Turing Centenary Research Project: Mind Mechanism and Mathematics. John Templeton Foundation.*
- 2013 *Harvard Horizons Scholar. Graduate School of Arts and Sciences, Harvard University.*
- 2012 *Term-Time Dissertation Research Grant. Charles Warren Center for Studies in American History (declined).*

- 2012-14 Science, Technology, Society (STS) Doctoral Dissertation Research Improvement Grant. *National Science Foundation*.
- 2008-12 Doctoral Fellowship. *Social Sciences and Humanities Research Council of Canada*.
- 2008-09 Ontario Graduate Scholarship (declined).
- 2007-08 Graduate Fellowship and Graduate Admission Award. *University of Toronto Arts and Sciences*.
- 2007 King's University Medal for Honours Thesis in History of Science and Technology.
- 2002-07 King's University Entrance Scholarship, Frank Sobey Scholarship, King's University Scholarship.

Publications

Research Publications

- 2017 "The Beckman Institute: Imagining Interdisciplinarity" in *The University of Illinois: Engine of Innovation*, ed. Frederick E. Hoxie (Urbana: University of Illinois Press, 2017).
- 2015 "Of Models and Machines: Implementing Bounded Rationality" in *Isis* Vol. 106, No. 3 (September 2015): 623 - 634.
- 2015 "Computer Science" in Georgina M. Montgomery, Mark A. Largent, eds. *A Companion to the History of American Science* (Wiley-Blackwell Publishing, December 2015): 55 - 68.
- 2013 "Machines Who Write" in *IEEE Annals of the History of Computing* Vol. 35, No. 2 (April-June 2013): 85-87.
- 2011 "AfterMath: The Work of Proof in the Age of Human-Machine Collaboration" in *Isis* Vol. 102, No. 3 (September 2011): 494-505.
- 2011 "Michel Coignet; Simple Theodolite and Plane Table Rule" in *Prints and the Pursuit of Knowledge in Early Modern Europe*, ed. Susan Dackerman (New Haven: Yale University Press): 354.

General Audience

- 2016 "Our AIs, Our Selves" in *Cosmologics Magazine*: <http://cosmologicsmagazine.com/stephanie-dick-our-ais-our-selves/>
- 2015 "The Future of Thinking: Computers and Minds in mid-Twentieth Century Imaginations," in *Histories of the Future*: <http://histscifi.com/>
- 2014 "The Pirate Bay" in *Cosmologics Magazine*: <http://cosmologicsmagazine.com/stephanie-dick-the-pirate-bay/>

Book Reviews

- 2016 *It Began with Babbage: The Genesis of Computer Science* by Subrata Dasgupta (Oxford University Press 2014) in *Technology and Culture* (forthcoming).
- 2013 *Coming of Age with Quantum Information: Notes on a Paulian Idea* by Christopher A. Fuchs (Cambridge University Press, 2011) in *Isis* Vol. 104, No. 3 (September 2013): 646-647.
- 2013 *Pioneer of the Information Age* by B. Jack Copeland (Oxford University Press, 2013) in *Endeavor* Vol. 37, No. 4 (December 2013): 195 - 195.

Academic Presentations

Invited Talks

- 2018 Early Career Plenary Lecture on the History of Mathematics. *European Society for the History of Science Annual Meeting*. London, UK.
- 2018 *After Math: Reasoning, Computing, and Proof in the Postwar United States*. *Johns Hopkins Department of History of Science and Technology Colloquium Series*. Baltimore, MA.
- 2018 “Making Up Minds: Thinking With, About, and For Humans”. *Automatons: From Ovid to AI*, Public Lecture Series at the University of King’s College. Halifax, NS.
- 2018 *Colleagues, Assistant, and Servants: Mathematical Visions of Early Computers*. Programming Languages Research Group, University of Pennsylvania, PA.
- 2018 *Colleagues, Assistants, and Servants: Mathematical Visions of Early Computers*. Mathematics Department, University of Pennsylvania. Philadelphia, PA.
- 2017 The Automation of Proof. “*Theory Group*” Seminar Series. Department of Computer Science, University of Pennsylvania. Philadelphia, PA.
- 2017 The Marxist in the Machine. *University of Chicago, Committee for Conceptual and Historical Studies of Science, lecture series*. Chicago, IL.
- 2017 *After Math: Reasoning, Computing, and Proof in the Postwar United States*. *Big Proof Initiative*. Cambridge University, Isaac Newton Institute for Mathematical Sciences. Cambridge, UK.
- 2017 *Remaking Reasoning*. *AI Now Experts Workshop*. Media Lab, Massachusetts Institute of Technology. Cambridge, MA.
- 2017 *After Math*. *New York City History of Science Consortium Lecture Series*. New York, NY.
- 2016 *Reproving Principia: Reasoning and Computing in the Post War United States*. *Department of Philosophy Colloquium Series*. Carnegie Mellon University, Pittsburgh, PA.
- 2016 *After Math: Reasoning, Proving, and Computing in the Postwar United States*. *Program in the History of Science and Medicine Colloquium Series*. Yale University. New Haven, CT.

- 2016 "Reformalism." University of California, Irvine Department of English, Research Cluster on "Form." Irvine, CA.
- 2015 "Putting Mathematics into the Computer: Implementation and Epistemology in Early Automated Logic." *15th Congress of Logic, Methodology and Philosophy of Science*. Helsinki, Finland.
- 2015 "That is not Why." *history of data/data in history*. Columbia University Center for Science and Society. New York, NY.
- 2015 "More Powerful Principles: Exploring the Early Automation of Proof." *Mistakes Were Made: History of Computing, Decompiled*. The Intel Science and Technology Center for Social Computing, New York University. New York, NY.
- 2015 "After Math: Following Mathematics into the Digital." *Microsoft Research New England Colloquium Series*. Cambridge, MA.
- 2015 "The Future of Thinking: Computers and Minds in Mid-Twentieth Century Imaginations." Princeton Workshop in the History of Science. Princeton, NJ.
- 2015 "Constructing a Mathematical Laboratory": An Early History of Computer Algebra Systems. *Joint Meeting of the American Mathematical Society and the Mathematics Association of America*. San Antonio, TX.
- 2014 "After Math: Following Mathematics into the Digital." *Philadelphia Area Seminar on History of Mathematics*. Philadelphia, PA.
- 2014 "(Re)configuring Minds, Proof, and Computing in the Postwar United States." *2014 Turing Centenary Research Project Workshop*. New York, NY.
- 2014 "The Agency of Servers: Humans and Nonhumans in the Pirate Bay Trial." *Scientific Orthodoxy*. Mahindra Humanities Center, Harvard University. Cambridge, MA.
- 2014 "The Media of Scholarship" with Peter Galison. *GSAS Alumni Symposium*. Harvard University. Cambridge, MA.
- 2014 "Aftermath: Following Mathematics into the Digital." MIT Program in Science, Technology, and Society, *Special Seminar*. Massachusetts Institute of Technology. Cambridge, MA.
- 2013 "Programming Proof: Introducing Computers to the Work of Mathematics." *Explorers and Pirates: Digital creators and the creation of value(s)*. The European University at Saint Petersburg. Saint Petersburg, Russia.
- 2013 "Reproving *Principia*: Automated Theorem Proving and the Materials of Mathematics." *American Mathematical Society Eastern Section Meeting*. Philadelphia, PA.
- 2013 "Reformalism: automated theorem proving and the materials of mathematics." *International Congress of History of Science, Technology and Medicine*. Manchester, UK.
- 2013 "Aftermath: Historical Explorations of Early Automated Reasoning." *2013 Turing Centenary Research Project Workshop*. Milan, Italy.

- 2013 "Displacing the Hand: Translating Proof into Computation." *Mathematics, Philosophy, and Literature*. Mahindra Humanities Center, Harvard University. Cambridge, MA.
- 2013 "Coded Collaboration: Doing Mathematics with Computers in the Second Half of the Twentieth Century." Harvard Kennedy School *STS Circle*.
- 2013 "Following Mathematics into the Digital: Early Automated Theorem-Proving in the United States." *Fishbein Workshop in the History and Philosophy of Science*, University of Chicago.
- 2012 "Designing Intuition: Computing and Mathematical Proof." *Joint Meeting of the American Mathematical Society and the Mathematics Association of America*. Boston, MA.

Conference Presentations

- 2017 "Technological Logics." *Organization of American Historians Annual Meeting*. New Orleans, LA.
- 2016 "The QED Manifesto." *History of Science Society Annual Meeting*. Atlanta, Georgia.
- 2016 "MACSYMA." *4S/EASST*. Barcelona, Spain.
- 2016 "Games of Chance in the AI Winter." *Society for the History of Technology Annual Meeting*. Singapore.
- 2016 "Maintaining the Novel: Legacy and Longevity in Microsoft Windows," with Daniel Volmar. *The Maintainers*. Stevens Institute of Technology. Stevens, NJ.
- 2015 "Encoding and Intervening." *History of Science Society Annual Meeting*. San Francisco, CA.
- 2015 "Implementation and Epistemology in Early Computer Mathematics." *British Society for the History of Science Annual Conference*. Swansea, Wales.
- 2015 "Programming Proof." *American Historical Association Annual Meeting*. New York, NY.
- 2014 "Mathematical Objects in Action: Proof in the Time of Computation." *The Digital Subject: Temporalities*. Paris, France.
- 2014 "Looking for Limits: Configuring Minds, Mathematics, and Machines in the Mid-Twentieth Century" in *Bounded Rationalities*, Plenary Session at the *History of Science Society Annual Meeting*. Chicago, IL.
- 2013 "'Mathematical Objects in Action': Ontological Entanglements of Mathematics and Computing." *History of Science Society Annual Meeting*. Boston, MA.
- 2013 "Following Mathematics into the Digital: Historical Explorations of Early Automated Theorem Proving." *Computability in Europe (CiE)*. Milan, Italy.
- 2013 "Rewriting *Principia Mathematica* into the Digital: Automated Theorem Proving and the Media of Mathematics." *Harvard-Yale Graduate Conference in Book History*. Cambridge, MA.

- 2012 “Buying Originality’: two approaches to the automation of logical proof.” *Society for the History of Technology Annual Meeting*. Copenhagen, Denmark.
- 2011 “The Geometer in the Machine: Diagrammatic Heuristics and Early Artificial Intelligence.” *History of Science Society Annual Meeting*, in the Official Sponsored Session of the *Forum for the History of the Mathematical Sciences*. Cleveland, OH.

Panels and Roundtables

- 2018 It’s Alive! Frankenstein in the Modern World. *In Conversation with the Rosenbach*, Rosenbach Library. Philadelphia, PA.
- 2015 “Encoding and Intervening” in *Roundtable: Writing Histories of Data*. History of Science Society Annual Meeting. San Diego, CA.

Teaching

Courses

- 2019 *Information Age*. Undergraduate Lecture Course. History and Sociology of Science, University of Pennsylvania.
- 2019 *Making Up Minds*. Freshman Seminar. History and Sociology of Science, University of Pennsylvania.
- 2018 *Prove It! Mathematics and Certainty*. Undergraduate Seminar. History and Sociology of Science, University of Pennsylvania.
- 2018 *Seminar in History and Sociology of Science*. Graduate Seminar. History and Sociology of Science, University of Pennsylvania.
- 2018 *Digital Democracy*. Advanced Undergraduate Seminar. History and Sociology of Science, University of Pennsylvania.
- 2018 *Cyberculture*. Undergraduate Seminar. History and Sociology of Science, University of Pennsylvania.
- 2018 *Information Age*. Undergraduate Lecture Course. History and Sociology of Science, University of Pennsylvania.
- 2017 *Digital Democracy*. Advanced Undergraduate Seminar. History and Sociology of Science, University of Pennsylvania.
- 2014 *Computing People*. Graduate Seminar. Program in STS, European University at Saint Petersburg.

Senior Thesis Advisor

- 2017-18 Lauren Murski. *The System Will See You Now: Redefining Quality Care in the Era of the Electronic Health Record*. University of Pennsylvania.
- 2011-12 Betsy Isaacson: *The Saint of Cyborgs: Saint Jude, Mondo 2000, And The Making of A Hacker Nation*. Harvard University.
- 2011-12 Angela Liu: *Bioethics in Government Commissions: History, Function and Discourse*. Harvard University.
- 2010-11 Grace Kim: *(Re)producing Art: Images And History in Art Conservation and Neuroaesthetics*. Harvard University.

Harvard University Teaching Fellow

- 2012 *Tutorial - Sophomore Year (HistSci 97)*. Prof. Anne Harrington. Spring. Received Harvard University Certificate of Distinction in Teaching
- 2011 *Knowing the World (HistSci 100)*. Prof. Adelheid Voskuhl. Fall.
- 2011 *The Einstein Revolution (Sciences of the Physical Universe 17)*. Prof. Peter Galison. Spring.

University of Toronto Teaching Assistant

- 2007 *History of Science (HPS 280 for students in Applied Sciences and Engineering)*. Physics. Prof. Victor Boantza. Fall.

Dalhousie University Grader

- 2007 *Understanding Scientific Reasoning (Phil 2660)*. John Davie. Summer.
- 2007 *Introduction to Philosophy (Phil 1010)*. Prof. Michael Hymers. Spring

Museum Experience

Exploratorium, San Francisco

- 2014 Exploratorium and Harvard Department of History of Science Collaborative Workshop. Aimed at cross-fertilization of DHS and Exploratorium cultures and prototyping of historical and interactive exhibits.

Collection of Historical Scientific Instruments, Harvard University

- 2012 Writer, Director. Original stage play, *Go Ask A.L.I.C.E.: Exploratory Vignettes* performed by American Repertory Theater actors in the exhibit "Go Ask A.L.I.C.E.: Turing Tests, Parlor Games, & Chatterbots."

- 2011-12 Wheatland Curatorial Fellow. Co-curator, "Go Ask A.L.I.C.E.: Turing Tests, Parlor Games, & Chatterbots."
- 2010 Student Curator. "Paper Worlds: Printing Knowledge in Early Modern Europe." Curated by students of History of Science Seminar 215r: *Science & Culture in Late Medieval & Early Modern Europe*.
- 2009-12 Cataloguer. ~500 objects related to mathematics, navigation, calculation, and computing.

Professional Service

- 2018 Ad hoc reviewer, NSF.
- 2018 Ad hoc reviewer, *Historical Studies in the Natural Sciences*.
- 2018 Ad hoc reviewer, *European Journal of Economic Thought*.
- 2017 Conference Organizational Committee. *The SHOT Special Interest Group for Computers, Information, and Society*. Philadelphia, PA.
- 2016 Ad hoc reviewer, *Isis*.
- 2013 Ad hoc reviewer, *IEEE Annals of the History of Computing*.
- 2013 Panel Organizer: *Historical Ontologies*. *History of Science Society Annual Meeting*. Boston, MA.
- 2013 Compiled and directed original stage play, *The Greatest Witness: A Theatrical Exploration of Galileo's "Solar Spots."* Performed at the conference *Heavenly Imperfection: Galileo's Discovery of Sunspots*. Harvard University, Cambridge, MA.
- 2013 Compiled and directed original stage play, *Mathematical Patterns*. Performed at the workshop *Mathematics, Philosophy, and Literature*, Mahindra Humanities Center, Harvard University.
- 2012 Panel Organizer: *Made in Automation*. *Society for the History of Technology Annual Meeting*. Copenhagen, Denmark.
- 2011-12 Co-Organizer of the Modern Sciences Working Group.
- 2011 Organizer of Phunday workshop in the history of the physical sciences.

References

Professor Peter Galison (dissertation advisor, general exam field supervisor)

Joseph Pellegrino University Professor
Department of History of Science
Department of Physics
Director, Collection of Historical Scientific Instruments
Harvard University
Cambridge, MA 02138, USA
galison@fas.harvard.edu

Professor Stefan Helmreich (dissertation committee member, general exam field supervisor)

Professor of Anthropology
Massachusetts Institute of Technology
Cambridge, MA 02142, USA
sgh2@mit.edu

Professor Barry Mazur (dissertation committee member)

Gade University Professor
Department of Mathematics
Harvard University
Cambridge, MA 02138, USA
barry.mazur@gmail.com

Professor Jimena Canales (dissertation committee member)

Associate Professor of History of Science
Harvard University
Cambridge, MA 02138, USA
canales@fas.harvard.edu

Professor Mario Biagioli (general exam field supervisor)

Distinguished Professor of Law and Science and Technology Studies
University of California Davis
Davis, CA 95616, USA
mbiagioli@ucdavis.edu

Professor Joan Richards (general exam field supervisor)

Professor of History
Brown University
Providence, RI 02912, USA
Joan_Richards@brown.edu

Jean-Francois Gauvin (supervisor at Collection of Historical Scientific Instruments)

Director of Administration / Lecturer
Collection of Historical Scientific Instruments
Harvard University
Cambridge, MA 02138 USA
gauvin@fas.harvard.edu