

# HPS&ST Note

April 2018

## Introduction

This HPS&ST monthly note is sent direct to about 7,450 individuals who directly or indirectly have expressed an interest in the contribution of history and philosophy of science to theoretical, curricular and pedagogical issues in science teaching, and/or interests in the promotion of innovative and more engaging and effective teaching of the history and philosophy of science. The note is sent on to different international and national HPS lists and international and national science teaching lists. In print or electronic form it has been published for 20+ years.

The note seeks to serve the diverse international community of HPS&ST scholars and teachers by disseminating information about events and publications that connect to concerns of the HPS&ST community.

Contributions to the note (publications, conferences, opinion pieces, etc.) are welcome and should be sent direct to the editor:

Michael R. Matthews, UNSW, [m.matthews@unsw.edu.au](mailto:m.matthews@unsw.edu.au).

The Note, along with RESOURCES, OBITUARIES, OPINION PIECES and more, are lodged at the website:

<http://www.hpsst.com/>

## **European Society for the History of Science Biennial Conference and British Society for the History of Science Annual Meeting, University College, London, 14-17 September 2018**

The organising committee of ESHS 2018 invite proposals for individual papers to be presented at the conference. The organisers will aim to arrange submissions into coherent strands. In selecting papers for the conference, the organisers will give preference to those that address, in some way, the conference theme of 'Unity and Disunity'. This can be interpreted very broadly, to address, amongst other topics, unity and disunity within and across diverse sciences, nations, periods, and historiographies; unity and disunity as ideals and realities; and unity and disunity as characterizing relations between the sciences and politics, technology, economics, and the arts. Submissions, including an abstract no longer than 300 words in either English or French, should be made, via the conference website <http://eshs2018.uk>, by 23.59 GMT on 28 February 2018.

## **4th Latin American Conference of the International History, Philosophy and Science Teaching Group (IHPST-LA), September 3 to 5, 2018, Federal University of ABC, UFABC, Santo André, Brazil**

After 8 years from the 1st Latin American Conference, in Maresias (SP), and 3 years from the 13th Biennial Conference of the IHPST, in Rio de Janeiro (RJ), Brazil will host again a group meeting. In three days of intense discussion, we seek to promote a wide debate among historians, educators, teachers and others on the relation between history, philosophy, sociology and science teaching.

There will be three kinds of submission of proposal: oral communication, poster and thematic symposia. Proposals may be submitted in Portuguese, Spanish or English.

Submission of proposals (all categories): from February 19 to March 30

Early registration deadline: June 3

If you have any doubts and suggestions, send an e-mail to [ihpstla2018@gmail.com](mailto:ihpstla2018@gmail.com)

Complete version of CFP: <http://www.brenoam.com/ihpstla-2018-en>.

## **International Conference on History of Science and Science Education (ICHSSE), 2018 August, 29-31, 2018, State University of Paraiba, Brazil**

This is the XI biennial conference gathering together researchers in history and philosophy of science and science education. The conference will be hosted by the Research Group on History of Science and Science Teaching (GHCEN) of State University of Paraiba.

In its 10 years of existence, GHCEN has contributed to Brazilian research on the historical and philosophical approach to science teaching. Composed by undergraduate and graduate students and high school teachers, the Group has researched and implemented teaching strategies to spread history and philosophy of science in science education. Its focus has been in the inquiry-based learning supported by didactical materials with the historical and philosophical approach. This includes historical research based on the modern historiography of science, lesson plans with a historical and inquiry-based approach, replication of historical experiments and instruments, multimedia materials (videos and cartoons) and theatre plays.

According to the connection with GHCEN research, the theme of this XI Conference will be the similarities between the humanistic goals and the science teaching.

In this Conference, we expect the presentations will indicate how different humanistic didactical approaches can contribute:

- To build a new perspective on science and its meaning to society;
- To improve science teaching from teacher's perspective;

- To motivate students to learn science and about science.

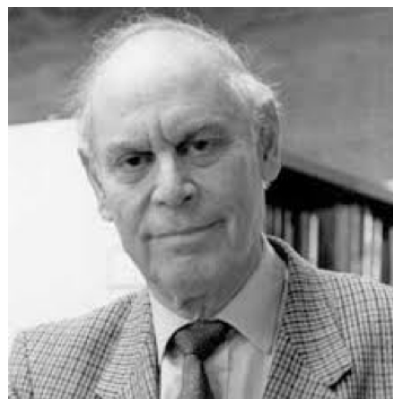
Details available [here](#).

## Opinion Page

### Tracing Tom Kuhn's Evolution: A Personal Perspective

Gerald Holton, Mallinckrodt Professor of Physics and professor of the history of science, emeritus, Harvard University

When the invitation to provide an opinion piece to the *HPS&ST Note* reached me, I thought I might offer some thoughts about Tom's creative work in a personal way, being now perhaps one of the few who knew and interacted with Tom in those early days, for over a dozen years.



We had some overlapping lives, intellectually, institutionally, culturally, and socially. Born in the same year, we received our doctorate degrees in physics at about the same time, under brilliant and demanding scientists, in the same building (while Harvard University was only just abandoning its quota system with respect to admitting Jewish students). President James B. Conant and his hugely ambitious General Education program excited in both of us intense interest in the history of science.

We also publicly acknowledged our intellectual debts in our early days to many of the same powerful scholars (among the contemporaries, Koyre, Sarton, Helene Metzger, R.K. Merton, Marjorie Nicolson, Ernest Nagel, etc., and among those from whom we both had taken courses or consulted, Quine, Philipp Frank, P.W. Bridgman, Van Vleck, Richard von Mises, Raphael Demos, etc.). We took part in the same informal workshops, and Tom and I saw each other and our families also at social gatherings. Later we corresponded, with Tom generously providing his opinions on some of my work. Moreover, while we had grown up in a philosophical climate much indebted to logical empiricism, each of us adopted positions different from that, in both our cases centered on the role of scientists' predisposi-

tions, although in quite opposite ways.

So despite the complexities that may hide behind friendships, for long enough segments of our lives moved along strangely parallel paths, during the period of our personal and professional maturing. That fact may give me some standing here, specifically in trying to help answer a persistent question about the evolutionary history of Tom's work.

That question was raised early and indirectly by Tom's friend and mentor, Harvard's President Conant, in Conant's famous letter, in which he begged off writing a preface to Tom's *Structure*. In uncharacteristic sharpness, Conant dismissed the conception of paradigm as "a magical verbal word to explain everything", and perceptively using the words "you have fallen in love" with it, he suggested what may have prompted Tom's choice of his main concepts.

The reaction became quite explicit in Steven Weinberg's essay of 1998, "The Revolution That Didn't Happen". While lauding many aspects of Tom's writings, Steve called the description of scientific revolutions "seriously misleading", insisting that changes in understanding nature "have been evolutionary, not revolutionary". He then asked: "What in Kuhn's life led him to his radical skepticism, to his strange view of the progress of science?"

In trying to provide an answer to this question, Steve shared a portion of a letter Tom had sent to him, in which Tom had written of having experienced a crucial "epiphany" around 1947, when he suddenly thought he could understand Aristotle's own mindset about the physics of that period, and so to speak slip into Aristotle's own paradigmatic preference. (Tom referred to the same incident also at other times.)

Tom's response to Steve is surely fascinating. But there may be other contributions to be made on this point. The time and place for one such additional insight came when Tom returned in November 1991 to Harvard to give his last lecture there, at his old home, launching the new annual Robert and Maurine Rothschild Lecture series, with his talk entitled "The Trouble with the Historical Philosophy of Science".

Some analysis of that event may suggest how to reconsider Steve's question.

In this quest, one has to start with a fact, based on observation and readings, that Tom was internally deeply anguished. (This mixture in some scholars is of course not unknown to us historians of science.) Part of his anguish was the result of his shifting disciplinary identity over time. He started to see himself as a physicist, at a time when his Harvard Physics department was astonishingly flowering. The work of professors there, such as Ed Purcell, Norman Ramsey, Julian Schwinger, Bob Pound, Van Vleck, and E.C. Kemble, set the bar for good work to be done there in any field very high indeed. For every graduate student who was inspired by this constellation there was likely to be another to feel discouraged.

At any rate, right after having gotten his Ph.D. degree in 1949, Tom said later tersely, "I got out of physics". His thesis adviser, Van Vleck, let it be known that this move annoyed him greatly, because Van Vleck thought he had wasted his time on his student. But Tom now began to train himself to become a historian of science under the auspices of Jim Conant, co-teaching in an undergraduate course in General Education, centered on case studies of the 17th century Scientific Revolution and its consequences. The profession was still quite young in the USA—few universities had history of science programs, Harvard having no such department for years to come.

Tom took his place as a historian of science with his book, meant for undergraduate-level courses, titled significantly *The Copernican Revolution*, though it was not published (in part because of Tom's meticulousness) until 1957. But meanwhile, in 1955, the possibility of a tenure appointment at Harvard was denied him by its Committee on General Education, reportedly because of Tom's then still thin publication record.

Philosophy of science had been a side interest for Tom since his school days, but had begun to move to the center by 1952-53, when Tom looked for funds to have time for writing a monograph that eventually became the *Structure of Scientific Revolutions* book of 1962. Happily, the University of California in Berkeley offered Tom an Assistant Professorship in History of Science, located in both the Depart-

ment of History and the Department of Philosophy. This arrangement illustrated his straddling of his professional identities at the time. Yet, this arrangement soon caused a deeply upsetting event. As late as 1995, Tom reported in an interview, “a quite destructive thing happened” and “I was extraordinarily angry, as you can guess, and very deeply hurt. I mean that’s a hurt that has never altogether gone away”<sup>1</sup>. What happened was that when Tom’s appointment to a full professorship came up, the Philosophy Department at Berkeley specifically opposed Tom’s membership in that department.

From his perspective, he had left physics early, had become a historian of science, but his final, public turn into a professional philosopher of science had been denied in a manner that was hurtful for the rest of his life. However, there was left a way for him clearly to establish his credentials in the field, although there too the bar was very high (one thinks of Quine and Putnam back “home”, and others elsewhere). This possibility, on which he had been working on and off for years, came into full view at Tom’s last lecture at Harvard, at the Rothschild Lecture<sup>2</sup>.

Tom begun his talk by confessing that the “transformation” of the “image of science”, which he thought he had helped to bring about, troubled him because some of his concepts had been used and developed by people who called themselves “Kuhnians”, although he regarded their viewpoints as “damagingly mistaken”. He was pained to be associated with their misunderstandings. In this feeling he was not alone. There were others who had reached astonishing popular success but suffered the same sort of pain. For example, Bridgman, in a publication in which he reassessed his own writings in the philosophy of science, confessed that regarding “this thing called ‘operationalism’...I feel that I have created a Frankenstein, which certainly got away from me”.

Next, in his lecture, Tom announced that he was currently at work on a new book, “a far larger project”, devoted to “a theory which I once called incommensurability”, although he regretted that in this talk he could not give details. But, importantly,

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1. Originally *Neusis* No.6, 1997, 145-200; then *The Road Since Structure*, J. Conant & J. Haugeland (eds.), 2000, University of Chicago Press, pp. 253-323.

2. *The Road Since Structure*, pp. 105-120.



here he would speak “as a philosopher”. A key point was that “for a philosopher who adopts the historical perspective, the problem is...understanding small incremental changes of belief” (rather than preoccupation with evaluation of belief itself). The use of the word “small” in that sentence prepared one to expect next a revisit to his conception of large changes, such as Revolutions. Instead, to my surprise, Tom went into the opposite direction, saying that “scientific development is like Darwinian evolution”.

He elaborated this viewpoint with his use of related conceptions such as “evolutionary tree” and “speciation”. Of course, Tom had briefly touched on evolutionary models toward the end of his *Structure* book of decades earlier, but in the context of chapters there only with headings such as “Progress through Revolutions” and “Revolution and Relativism”. No longer. Now his evolving view—he called it “reconceptualization”—had brought him, as he declared at the end of his talk, to the need to reinterpret the main parts of his previous thoughts. That, he announced, would be found in his new, to-be-expected work, where, as he put it, “the answer is incommensurability”.

Much of Tom’s promise of a reconceptualized, reinterpreted version of his previous conceptions—as well as his analogy of scientific development with Darwinian evolution—would have appealed to previous critics like Steven Weinberg (and there had been many others). But the proof of the promise had to wait for the book. One could feel that once more the stakes were high for Tom. Speaking explicitly as a philosopher, his standing in that profession would now hinge on the new work, of which he could give us in his lecture only hints. But although Tom talked about this important project later (for example in a long interview, published in 1991), he was ultimately not able to publish it, although needed to prove at last his asserted rupture between his successive paradigms.

And that, in my view, was a chief source of Tom’s internal state of dismay, especially in his last decade, as he was trying to reach the new, high professional identity level he had set for himself, but had been denied him. He had always been hard on himself; and had been through the harsh school of making himself anew as he was evolving—from physics to history to philosophy. As he told his interviewers in

October 1995, less than a year before his death: “I am an anxious, neurotic”.

Sadly, it was worse. There are good reasons to think that near the end of his career Tom considered himself to have been a failure. Yet, he would have been the only one to make such a severe judgment about himself. As illustrated by the persistent, widespread attention being paid to his work, his place in scholarship is of course secure.

Above is adapted and excerpted from Gerald Holton, “Steve’s Question and Tom’s Last Lecture”, in Alexander Blum *et al.*, *Shifting Paradigms*, Edition Open Access, 2016.

Further information: See [Prof. Gerald Holton’s faculty page at Harvard University](#) for the following: a selection of his books and a few of his published essays (downloadable free), for his Curriculum Vitae, for his DASH (Digital Access to Scholarship at Harvard), and for his Department of Physics Faculty Webpage.

## Invitation to Submit Opinion Piece

In order to make better educational use of the wide geographical and disciplinary reach of this HPS&ST Note, invitations are extended for readers to contribute opinion or position pieces or suggestions about any aspect of the past, present or future of HPS&ST studies.

Contributions can be sent direct to editor. Ideally, they might be pieces that are already on the web, in which case a few paragraphs introduction, with link to web site can be sent, or else the pieces will be put on the web with a link given in the Note.

They will be archived in the OPINION folder at the HPS&ST web site:

<http://www.hpsst.com/>.

Previous HPS&ST Note Opinion Pieces at <http://www.hpsst.com/>

Monica H. Green, History Department, Arizona State University, [On Learning How to Teach the Black Death](#) (March 2018).

Stephen Pinker, Psychology Department, Harvard University, [The Intellectual War on Science](#) (February 2018).

Michael Ruse, Philosophy Department, Florida State University, [Does Life Have Meaning? Or is it Self-Deception at Best and Terrifyingly Absurd at Worst?](#) (January 2018).

Mario Bunge, Philosophy Department, McGill University, [In Defence of Scientism](#) (December 2017).

Susan Haack, Philosophy and Law Departments, University of Miami, [The Future of Philosophy, the Seduction of Scientism](#) (November 2017).

Nicholas Maxwell, University College London, [What's Wrong with HPS and What Needs be Done to Put it Right?](#) (June 2017).

Heinz W. Drodste, [An Interview with Mario Bunge](#) (May 2017).

Nicholas Maxwell, University College London, [The Crisis of Our Times and What to do About It](#) (April 2017).

Eric Scerri, UCLA, [Bringing Science Down to Earth](#) (March 2017).

Robert Nola, University of Auckland, [Fake News in the Post-Truth World](#), (February 2017).

Michael D. Higgins, President of Ireland, [The Need to Teach Philosophy in Schools](#) (December 2016).

Philip A. Sullivan, University of Toronto, [What is wrong with Mathematics Teaching in Ontario?](#) (July 2016).

Gregory Radick, Leeds University, [How Mendel's legacy holds back the teaching of science](#) (June 2016).

Matthew Stanley, New York University, [Why Should Physicists Study History?](#)

## Thomas Kuhn and Science Education

Following Gerald Holton's Opinion Piece, the following published material on Thomas Kuhn and Science Education could be of interest to readers:

Matthews, M.R. (ed.): 2000, '[Thomas Kuhn and Science Education: A Special Double Issue](#)', *Science & Education* 9(1-2).

Michael R. Matthews / Editorial

Thomas S. Kuhn / On Learning Physics

Alexander T. Levine / Which Way is Up? Thomas Kuhn's Analogy to Conceptual Development in Childhood

Steve Fuller / From Conant's Education Strategy to Kuhn's Research Strategy

Van Berkel & Wobbe De Vos / Normal Science Education and Its Dangers: The Case of School Chemistry

Stephen G. Brush / Thomas Kuhn as an Historian of Science

Howard Sankey / Kuhn's Ontological Relativism

Robert Nola / Saving Kuhn from the Sociologists of Science

Harry L. Shipman / Thomas Kuhn's Influence on Astronomers

Hanne Andersen / Learning by Ostension: Thomas Kuhn on Science Education

Stellan Ohlsson / Falsification, Anomalies and the Naturalistic Approach to Cognitive Change

Cathleen C. Loving & William W. Cobern / Invoking Thomas Kuhn: What Citation Analysis Reveals for Science Education

Matthews, M.R.: 2004, 'Thomas Kuhn and Science Education: What Lessons can be Learnt?' *Science Education* 88 (1), 90-118.

## PhD Theses in HPS&ST Domain

This will be a new section of the monthly HPS&ST Note. The Note is the ideal medium for publicizing and making known submitted and awarded doctoral theses in the HPS&ST domain.

The following details should be submitted to the editor at [m.matthews@unsw.edu.au](mailto:m.matthews@unsw.edu.au):

- Candidate's Name and email

- Institution
- Supervisor
- Thesis title
- Abstract of 100-300 words
- Web link when theses are required to be submitted for Open search on web.

## Recent HPS&ST Research Articles

Kairos. *Journal of Philosophy & Science* (Vol. 19, N. 1, 2017) Thematic Issue: Science and Common Sense Available [here](#).

Borgerding, L. A., & Dagistan, M. (2018) Preservice science teachers' concerns and approaches for teaching socioscientific and controversial issues. *Journal of Science Teacher Education*, 1-24. doi:[10.1080/1046560X.2018.1440860](https://doi.org/10.1080/1046560X.2018.1440860)

Bruguère, C., Perru, O., & Charles, F. (2018) The Concept of Metamorphosis and its Metaphors: Possible and Impossible Transformations of Life; Metamorphosis in Children's Literature. *Science & Education*, 1-20. doi:[10.1007/s11191-018-9959-x](https://doi.org/10.1007/s11191-018-9959-x) online first

Clement, J. J. (2018) Reasoning Patterns in Galileo's Analysis of Machines and in Expert Protocols: Roles for Analogy, Imagery, and Mental Simulation. *Topoi*, 1-13. doi:[10.1007/s11245-018-9545-5](https://doi.org/10.1007/s11245-018-9545-5) online first

Galili, I. (2018) Physics and Mathematics as Interwoven Disciplines in Science Education. *Science & Education*, 1-31. doi:[10.1007/s11191-018-9958-y](https://doi.org/10.1007/s11191-018-9958-y) online first

Gogolin, S., & Krüger, D. (2018) Students' understanding of the nature and purpose of models. *Journal of Research in Science Teaching*, 1-26. doi:[10.1002/tea.21453](https://doi.org/10.1002/tea.21453) online first

- Grooms, J., Sampson, V., & Enderle, P. (2018) How concept familiarity and experience with scientific argumentation are related to the way groups participate in an episode of argumentation. *Journal of Research in Science Teaching*, 1-23. doi:[10.1002/tea.21451](https://doi.org/10.1002/tea.21451) online first
- Henriksen, E. K, Angell, C., Vistnes, A.I., & Bungum, B. (2018) What Is Light? Students' Reflections on the Wave-Particle Duality of Light and the Nature of Physics. *Science & Education*, 1-31. doi:[10.1007/s11191-018-9963-1](https://doi.org/10.1007/s11191-018-9963-1) online first
- Howitt, S. M., & Wilson, A. N. (2018) Reflecting on the use and abuse of scientific data facilitates students' ethical and epistemological development. *Science Education*, 1-22. doi:[10.1002/sce.21333](https://doi.org/10.1002/sce.21333) online first
- Ighbariah, A., & Wagner, R. (2018) Ibn al-Haytham's Revision of the Euclidean Foundations of Mathematics. *HOPOS: Journal of the International Society for the History of Philosophy of Science*, 1-25. doi:[10.1086/695957](https://doi.org/10.1086/695957) online first
- Karam, R. (2018) Fresnel's original interpretation of complex numbers in 19th century optics. *American Journal of Physics*, 86(4), 245-249. doi:[10.1119/1.5011366](https://doi.org/10.1119/1.5011366)
- Kelly, L. B. (2018) An analysis of award-winning science trade books for children: Who are the scientists, and what is science? *Journal of Research in Science Teaching*, 1-23. doi:[10.1002/tea.21447](https://doi.org/10.1002/tea.21447) online first
- Laherto, A. et al. (2018) Contextualizing the EU's "Responsible Research and Innovation" Policy in Science Education: A Conceptual Comparison with the Nature of Science Concept and Practical Examples. *EURASIA J. Math., Sci Tech. Ed*, 14(6), 2287–2300. doi:[10.29333/ejmste/89513](https://doi.org/10.29333/ejmste/89513)
- Larison, K.D. (2018) Taking the Scientist's Perspective: The Nonfiction Narrative Engages Episodic Memory to Enhance Students' Understanding of Scientists and Their Practices. *Science & Education*, 1-25. doi:[10.1007/s11191-018-9957-z](https://doi.org/10.1007/s11191-018-9957-z) online first
- Lu, Q., Zhang, H., & Wei, B. (2018) Exploration of the variety of teachers' VNOS in

- China: Is the “step-over development” approach effective? *Asia-Pacific Science Education*, 4 (5), 1-23. doi:[10.1186/s41029-018-0023-6](https://doi.org/10.1186/s41029-018-0023-6) online first
- O’Raifeartaigh, C., O’Keeffe, M., Nahm, W., & Mitton, S. (2018) One hundred years of the cosmological constant: from “superfluous stunt” to dark energy. *The European Physical Journal H*, 1-45. doi:[10.1140/epjh/e2017-80061-7](https://doi.org/10.1140/epjh/e2017-80061-7) online first
- Paige, K., & Hardy, G. (2018) Science as Human Endeavour, Critical Pedagogy and Practitioner Inquiry: Three Early Career Cases. *International Journal of Science and Mathematics Education*, 1-21. doi:[10.1007/s10763-018-9887-x](https://doi.org/10.1007/s10763-018-9887-x) online first
- Reichenberger, A. (2018) Émilie Du Châtelet’s interpretation of the laws of motion in the light of 18th century mechanics. *Studies in History and Philosophy of Science Part A*, 1-11. doi:[10.1016/j.shpsa.2018.01.006](https://doi.org/10.1016/j.shpsa.2018.01.006) online first
- Reinisch, B., & Krüger, D. (2018) Preservice Biology Teachers’ Conceptions About the Tentative Nature of Theories and Models in Biology. *Research in Science Education*, 48(1), 71-103. doi:[10.1007/s11165-016-9559-1](https://doi.org/10.1007/s11165-016-9559-1)
- Sezen-Barrie, A. (2018) Utilizing Professional Vision in Supporting Preservice Teachers’ Learning About Contextualized Scientific Practices: Collaborative Discourse Practices Between Teachers and Scientists. *Science & Education*, 1-24. doi:[10.1007/s11191-018-9961-3](https://doi.org/10.1007/s11191-018-9961-3) online first
- Trlifajová, K. (2018) Bolzano’s Infinite Quantities. *Foundations of Science*, 1-24. doi:[10.1007/s10699-018-9549-z](https://doi.org/10.1007/s10699-018-9549-z) online first
- Tuboly, A.T. (2018) Logical Empiricism in International Context. *HOPOS: The Journal of the International Society for the History of Philosophy of Science*, 1-7. doi:[10.1086/696346](https://doi.org/10.1086/696346) online first [essay review]
- Wray, K. B. (2018) A new twist to the No Miracles Argument for the success of science. *Studies in History and Philosophy of Science Part A*, 1-4. doi:[10.1016/j.shpsa.2018.02.002](https://doi.org/10.1016/j.shpsa.2018.02.002) online first



## Recent HPS&ST Related Books

Ausiello, Giorgio (2018) *The Making of a New Science: A Personal Journey Through the Early Years of Theoretical Computer Science*. Dordrecht: Springer. ISBN 978-3-319-62680-2

“This book explains the development of theoretical computer science in its early stages, specifically from 1965 to 1990. The author is among the pioneers of theoretical computer science, and he guides the reader through the early stages of development of this new discipline. He explains the origins of the field, arising from disciplines such as logic, mathematics, and electronics, and he describes the evolution of the key principles of computing in strands such as computability, algorithms, and programming.

“But mainly it’s a story about people – pioneers with diverse backgrounds and characters came together to overcome philosophical and institutional challenges and build a community. They collaborated on research efforts, they established schools and conferences, they developed the first related university courses, they taught generations of future researchers and practitioners, and they set up the key publications to communicate and archive their knowledge.” (From the Publisher)

More information available [here](#).

Bliss, Catherine (2018) *Social by Nature: The Promise and Peril of Sociogenomics*. Redwood City, CA: SUP. ISBN: 9780804798341

“Sociogenomics has rapidly become one of the trendiest sciences of the new millennium. Practitioners view human nature and life outcomes as the result of genetic and social factors. In *Social by Nature*,

Catherine Bliss recognizes the promise of this interdisciplinary young science, but also questions its implications for the future. As she points out, the claim that genetic similarities cause groups of people to behave in similar ways is not new—and a dark history of eugenics warns us of its dangers.

“Over the last decade, sociogenomics has enjoyed a largely uncritical rise to prominence and acceptance in popular culture. Researchers have published studies showing that things like educational attainment, gang membership, and life satisfaction are encoded in our DNA long before we say our first word. Strangely, unlike the racial debates over IQ scores in the ’70s and ’90s, sociogenomics has not received any major backlash. By exposing the shocking parallels between sociogenomics and older, long-discredited, sciences, Bliss persuasively argues for a more thoughtful public reception of any study that reduces human nature to a mere sequence of genes.

“This book is a powerful call for researchers to approach their work in more socially responsible ways, and a must-read for anyone who wants to better understand the scholarship that impacts how we see ourselves and our society.” (From the publishers)

More information available [here](#).

Currie, Adrian (2018) *Rock, Bone, and Ruin: An Optimist’s Guide to the Historical Sciences*. Cambridge, MA: The MIT Press. ISBN: 9780262037266

“The ‘historical’ sciences have been neglected by philosophers. Adrian Currie analyzes both the problems and the opportunities involved in reconstructing and understanding the unobservable deep past. His engaging discussion—ranging from the character of global ice ages through the habits of giant dinosaurs to the meaning of Mayan monuments—explores the surprising commonalities that underlie these superficially

diverse sciences.” –Martin Rudwick, University of Cambridge; author of *Earth’s Deep History and Bursting the Limits of Time*

“*Rock, Bone, and Ruin* is an extraordinarily ambitious, provocative, and generative treatment of the epistemic predicament of the historical sciences. Adrian Currie trains his philosophical eye on the research strategies of ‘unlucky’ historical scientists—those who contend with messy, incomplete, and opaque traces of the past—and explains how, against the epistemic odds, they establish a robust understanding of seemingly inaccessible geological events, evolutionary processes, and cultural dynamics. This is a nuanced and richly illustrated account of scientists operating under non-ideal circumstances that demonstrates what can be accomplished by taking seriously the turn to practice. It has implications that will be of interest to practitioners and it is an incisive argument for doing philosophy differently: attentive to the epistemic challenges scientists actually face, resolutely local and contextual, and unabashedly normative.” –Alison Wylie, Professor, Department of Philosophy, University of British Columbia

More information available [here](#).

Danks, David, & Ippoliti, Emiliano (Eds.) (2018) *Building Theories: Heuristics and Hypotheses in Sciences*. Dordrecht: Springer. ISBN 978-3-319-72787-5

“This book explores new findings on the long-neglected topic of theory construction and discovery, and challenges the orthodox, current division of scientific development into discrete stages: the stage of generation of new hypotheses; the stage of collection of relevant data; the stage of justification of possible theories; and the final stage of selection from among equally confirmed theories. The chapters, written by leading researchers, offer an interdisciplinary perspective on various aspects of the processes by which theories rationally should, and descriptively are, built. They address issues such as the role of

problem-solving and heuristic reasoning in theory-building; how inferences and models shape the pursuit of scientific knowledge; the relation between problem-solving and scientific discovery; the relative values of the syntactic, semantic, and pragmatic view of theories in understanding theory construction; and the relation between ampliative inferences, heuristic reasoning, and models as a means for building new theories and knowledge. Through detailed arguments and examinations, the volume collectively challenges the orthodox view's main tenets by characterizing the ways in which the different "stages" are logically, temporally, and psychologically intertwined. As a group, the chapters provide several attempts to answer long-standing questions about the possibility of a unified conceptual framework for building theories and formulating hypotheses." (From the Publishers)

More information available [here](#).

Englehardt, Elaine E., & Pritchard, Michael S. (Eds.) (2018) *Ethics Across the Curriculum - Pedagogical Perspectives*. Dordrecht: Springer. ISBN 978-3-319-78939-2

"This book features articles by more than twenty experienced teachers of ethics who are committed to the idea that ethics can and should be taught virtually anywhere in the higher education curriculum. They explore a variety of ways in which this might best be done.

"Traditionally confined largely to programs in philosophy and religion, the teaching of ethics has in recent decades spread across the curriculum of higher education. The contributors to this book discuss the rationale for supporting such efforts, the variety of challenges these efforts face, and the sorts of benefits faculty and students who participate in ethics across the curriculum endeavors can expect.

"An overriding theme of this book is that the teaching of ethics should not be restricted to one or two courses in philosophy or religion pro-

grams, but rather be addressed wherever relevant anywhere in the curriculum. For example, accredited engineering programs are expected to ensure that their students are introduced to the ethical dimensions of engineering. This can involve consideration of ethical issues within particular areas of engineering (e.g., civil, mechanical, electrical, chemical) as distinctive segments of certain courses (e.g., those that focus on design problems), or as a full semester course in ethics in engineering. Similar approaches can be taken in nursing, medicine, law, social work, psychology, accountancy, management, and so on. That is, some emphasis on ethics can be expected to be found in broad range of academic disciplines.

“However, many ethical issues require careful attention from the perspectives of several disciplines at once, and in ways that require their joining hands. Recognizing that adequately addressing many ethical issues may require the inclusion of perspectives from a variety of disciplines makes apparent the need for effective communication and reflection across disciplines, not simply within them. This, in turn, suggests that faculty and their students can benefit from special programs that are designed to include participants from a variety of disciplines. Such programs will be a central feature of this book. Although some differences might arise in how such issues might best be discussed across different parts of the curriculum, these discussions might be joined in ways that help students, faculty, administrators, and the wider public in higher education better appreciate their shared ethical ground. (From the publisher)

More information available [here](#).

Gould, Roy R. (2018) *Universe in Creation: A New Understanding of the Big Bang and the Emergence of Life*. Cambridge, MA: Harvard University Press. ISBN 9780674976078

“When we wonder where we came from, or ponder the meaning of

our lives, our thoughts might go back to childhood. In his search for meaning, Roy Gould rewinds further to where everything began: the birth of the cosmos. He is the universe's joyful biographer, recognizing that its story and ours are intertwined, and that one of the most extraordinary things about the universe is that it created beings that can observe and appreciate it. *Universe in Creation* asks whether or not the universe's creation of stars, galaxies, living cells, and human beings reveals an unfolding plan. It is a delightful, spirited, and brilliant inquiry."—Molly Bentley, Executive Producer, Big Picture Science

"The universe could not have dreamt up a better press agent for its story than Roy Gould. From what connects katydids and elephants, through the natural evolution of RNAs, to exoplanets and the Mandelbrot set—the author's sense of wonder at what is around us is absolutely infectious. Gould's explanation of how order is naturally created by using disorder at all scales is the best I have seen, making sense of purposefulness without purpose. A joyous romp through a cosmos full of wonders, and changing still!"—Roald Hoffmann, chemist and writer

"Exciting, original, and extremely well written, *Universe in Creation* offers a philosophically novel perspective on the nature of the universe."—Avi Loeb, Harvard University

More information available [here](#).

Heyes, Cecilia (2018) *Cognitive Gadgets: The Cultural Evolution of Thinking*. Cambridge, MA: Harvard University Press. ISBN 9780674980150

"Human minds are strange and powerful, but how did they become that way? Cecilia Heyes argues that culture is the prime mover, upgrading the mind by installing a cascade of 'gadgets'—non-genetic innovations that enable imitation, mind-reading, episodic memory, and

more. Cognitive Gadgets is an elegant, compelling, and groundbreaking work that should be read by anyone interested in what we are and how we came to be.”–Andy Clark, University of Edinburgh

“Evolutionary psychology has been plagued by theories that are interesting but not testable, and theories that are testable but not interesting. In her exposition of cognitive gadgets, Heyes escapes from this trap. By emphasizing specific mechanisms, she makes precise predictions about what makes human cognition unique, and demonstrates that human culture is not just about accumulating knowledge—it also enables each of us to learn how to think.”–Chris Frith, University College London

“Cecilia Heyes presents a new hypothesis to explain the one feature that distinguishes *Homo sapiens* from all other species: the mind. Through lucid, compelling writing, this masterly exegesis proposes that the key features of the human mind, termed ‘cognitive gadgets,’ are the products of cultural rather than genetic evolution. It will stimulate its readers to think deeply, as Heyes has done, about what it means to be human.”–Lord John Krebs, University of Oxford

“Cognitive Gadgets is a terrific book. Heyes makes a very surprising claim, arguing that human cognitive capacities—language, technical and causal intelligence, and the capacity to understand others—are not built by natural selection, but are instead cultural adaptations, installed by social learning. It is a richly informed, beautifully clear, and lucidly argued case.”–Kim Sterelny, Australian National University

More information available [here](#).

Kaufman, Allison B., & Kaufman, James C. (Eds.) (2018) *Pseudoscience: The Conspiracy Against Science*. Cambridge, MA: The MIT Press. ISBN: 9780262037426

“In a post-truth, fake news world, we are particularly susceptible to

the claims of pseudoscience. When emotions and opinions are more widely disseminated than scientific findings, and self-proclaimed experts get their expertise from Google, how can the average person distinguish real science from fake? This book examines pseudoscience from a variety of perspectives, through case studies, analysis, and personal accounts that show how to recognize pseudoscience, why it is so widely accepted, and how to advocate for real science.

“Contributors examine the basics of pseudoscience, including issues of cognitive bias; the costs of pseudoscience, with accounts of naturopathy and logical fallacies in the anti-vaccination movement; perceptions of scientific soundness; the mainstream presence of “integrative medicine,” hypnosis, and parapsychology; and the use of case studies and new media in science advocacy.” (From the Publishers)

More information available [here](#).

Merlin, Francesca, & Huneman, Philippe (Eds.) (2018) *Philosophie, histoire, biologie Mélanges offerts à Jean Gayon*. Paris: éditions Matériologiques. ISBN: 978-2-37361-144-1

“Le philosophe et historien des sciences Jean Gayon est une figure éminente de ces deux disciplines. Son champ d'étude privilégié : la biologie, plus particulièrement la biologie de l'évolution. Au cours des trois dernières décennies, il a formé de nombreux chercheurs, notamment en encadrant des thèses souvent novatrices, et lancé une multitude d'initiatives de recherche qui ont permis à la philosophie de la biologie de prendre un essor sans pareil en France, et ce notamment grâce à des liens privilégiés avec les figures marquantes du domaine, œuvrant à l'époque aux états-Unis et en Angleterre.

“Les textes rassemblés ici rendent hommage à l'homme, à l'enseignant et au penseur qui a largement impulsé le renouveau de la philosophie de la biologie, par ses réflexions déterminantes sur la théorie de



l'évolution, la génétique, le hasard, etc., objets et concepts repensés conjointement à la lumière de l'approche classique de l'« épistémologie historique » et de celle fondée sur la philosophie analytique. Collègues, élèves et amis, réunis lors de journées d'hommage en mars 2017 dont ce livre est issu, montrent à quel point Jean Gayon est un pilier essentiel de la nouvelle philosophie des sciences. Au fil de 26 chapitres, répartis en quatre parties (« épistémologie historique et philosophie de la biologie », « Histoire de la génétique », « études d'histoire et de philosophie de la biologie évolutive : thèmes de Jean Gayon », « Regards sur Jean Gayon, historien et philosophe, enseignant et chercheur »), ce livre témoigne de la présence et de la nécessaire postérité de l'œuvre de Jean Gayon.” (From the Publisher)

More information available [here](#).

Nugayev, Rinat M. (2018) *Einstein's Revolution: A Study of Theory Unification*. Potomac, MD: Bentham Science Publishers. eISBN: 978-1-68108-635-4

“Einstein's Revolution: A Study of Theory Unification gives students of physics and philosophy, and general readers, an epistemological insight into the genesis of Einstein's special relativity and its further unification with other theories. The book starts with an introductory analysis of the reasons for mature theory change in science. This leads to a discussion about special relativity genesis.

“It is contended that Einstein's ingenious approach to special relativity creation, substantially distinguishing him from Lorentz's and Poincaré's invaluable impacts, turns to be a milestone of maxwellian electrodynamics, statistical mechanics and thermodynamics reconciliation design. Special relativity turns out to be grounded on Einstein's breakthrough 1905 light quantum hypothesis. Eventually the author amends the received view on the general relativity genesis by stressing that the

main reason for Einstein's victory over the rival programmes of Abraham and Nordström was a unificationist character of Einstein's research programme." (From the publisher)

More information available [here](#).

Parker, Sue Taylor, Langer, Jonas, & Milbrath Constance (Eds.) (2018) *Biology and Knowledge Revisited: From Neurogenesis to Psychogenesis*. Abingdon: Routledge. ISBN: 9781138012790

"Contributors trace the history of ideas concerning the relationship between evolution and development, and bring powerful new conceptual systems and research data to bear on understanding the problem of experience-contingent brain development and evolution. They focus on processes of phenotype construction—which fill the gap between genes and behavior - and demonstrate that evolutionary psychological models of innate mental modules are incompatible with what is known about these processes. This book presents exciting new approaches to the development and evolution of cognitive and linguistic abilities.

"Returning to the broad evolutionary theme of a previous meeting, the symposium focused on specifically constructivist approaches to neurogenesis and language acquisition, and their evolution. It was organized around ideas about the relationship between development and evolution raised in Piaget's books. Research in this arena has yielded cutting-edge insight into behavioral influences on brain plasticity.

"Two of its subthemes run throughout—a critique of modularity models popular among evolutionary psychologists and the prescient yet flawed nature of Piaget's critique of the modern synthesis of evolution. As a result, *Biology and Knowledge Revisited* is intended for developmental psychologists, psycholinguists, biological anthropologists,

evolutionary psychologists, and philosophers of science.” (From the Publishers)

More information available [here](#).

Purrington, Robert D. (2018) *The Heroic Age: The Creation of Quantum Mechanics, 1925-1940*. Oxford: Oxford University Press

“Quantum theory is one of the great achievements of twentieth century physics. Born at the very beginning of the century, it attained a definitive form by 1932, yet continued to evolve throughout the century. Its applications remain fully a part of modern life. It should thus come as no surprise that literature on the history of quantum theory is vast, but author Robert D. Purrington approaches the story from a new angle, by examining the original physics papers and scientific studies from before the creation of quantum mechanics to how scientists think about and discuss the subject today.

“*The Heroic Age* presents for the first time a detailed but compact and manageable history of the creation of quantum theory, and shows precisely where each important idea originated. Purrington provides the history of the crucial developmental years of quantum theory with an emphasis on the literature rather than an overview of this period focusing on personalities or personal stories of the scientists involved. This book instead focuses on how the theoretical discoveries came about, when and where they were published, and how they became accepted as part of the scientific canon.” (From the Publisher)

More information available [here](#).

Shamey, Renzo, Kuehni, Rolf (Eds.) (2018) *Pioneers of Color Science*. Dordrecht: Springer. ISBN: 978-3-319-30809-8

“This book offers the reader a comprehensive overview of the historical development of color science, told through the stories of more than 90 of the most prominent figures in the field and their contributions.

“This book comprises an extensive set of biographical essays about pioneering scientists in the field of color science, describing their most significant achievements and explaining how their findings influenced our understanding of color. Grouped in chapters by historical period, each chapter is prefaced with a short introduction which sets the essays in context and helps the reader to appreciate the background and the importance of the contributions made.

(...)

“A useful reference for color scientists, science historians, artists and others, *Pioneers of Color Science* offers a fascinating insight into the development of color science and the nature of scientific advance.”  
(From the publisher)

More information available [here](#).

Sternberg, Robert J., & Kaufman, James C. (Eds.) (2018) *The Nature of Human Creativity*. Cambridge: Cambridge University Press. ISBN: 9781316649022

“This book provides an overview of the approaches of leading scholars to understanding the nature of creativity, its measurement, its investigation, its development, and its importance to society. The authors are the twenty-four psychological scientists who are most frequently cited in the four major textbooks on creativity, and they can thus be considered among the most eminent living scholars in the field. Authors discuss how they define creativity, the kinds of questions they have addressed, theories they have proposed, and a description of their research and the most interesting empirical results it has produced.

The chapters represent a wide range of substantive and methodological emphases, including psychometric, cognitive, expertise-based, developmental, neuropsychological, cultural, systems, and group-difference approaches. *The Nature of Human Creativity* brings together an incredible diversity of viewpoints, helping students and researchers to see the points of consensus as well as the differences in contemporary perspectives.” (From the Publisher)

More information available [here](#).

Thomas, Emily (2018) *Absolute Time: Rifts in Early Modern British Metaphysics*. Oxford: OUP. ISBN: 9780198807933

“What is time? This is one of the most fundamental questions we can ask. Traditionally, the answer was that time is a product of the human mind, or of the motion of celestial bodies. In the mid-seventeenth century, a new kind of answer emerged: time or eternal duration is ‘absolute’, in the sense that it is independent of human minds and material bodies.

“Emily Thomas explores the development of absolute time or eternal duration during one of Britain’s richest and most creative metaphysical periods, from the 1640s to the 1730s. She introduces an interconnected set of main characters - Henry More, Walter Charleton, Isaac Barrow, Isaac Newton, John Locke, Samuel Clarke, and John Jackson - alongside a large and varied supporting cast, whose metaphysical views are all read in their historical context and given a place in the seventeenth- and eighteenth-century development of thought about time.” (From the Publisher)

More information available [here](#).

Tibayrenc, Michael., Ayala, Francisco J. (Eds.) (2017). *On human nature: biology, psychology, ethics, politics, and religion*. San Diego: Academic Press, ISBN: 9780124201903

“*On Human Nature: Biology, Psychology, Ethics, Politics, and Religion* covers the present state of knowledge on human diversity and its adaptive significance through a broad and eclectic selection of representative chapters. This transdisciplinary work brings together specialists from various fields who rarely interact, including geneticists, evolutionists, physicians, ethologists, psychoanalysts, anthropologists, sociologists, theologians, historians, linguists, and philosophers.

“Genomic diversity is covered in several chapters dealing with biology, including the differences in men and apes and the genetic diversity of mankind. Top specialists, known for their open mind and broad knowledge have been carefully selected to cover each topic. The book is therefore at the crossroads between biology and human sciences, going beyond classical science in the Popperian sense.

Reviewed in: Kampourakis, K.(2018) *Human Nature from Multiple Perspectives Science & Education*. doi:0.1007/s11191-017-9953-8.

More information available [here](#).

Winsberg, Eric (2018) *Philosophy and Climate Science*. Cambridge: Cambridge University Press. ISBN: 9781316646922

“There continues to be a vigorous public debate in our society about the status of climate science. Much of the skepticism voiced in this debate suffers from a lack of understanding of how the science works - in particular the complex interdisciplinary scientific modeling activities such as those which are at the heart of climate science. In this book Eric Winsberg shows clearly and accessibly how philosophy of science

can contribute to our understanding of climate science, and how it can also shape climate policy debates and provide a starting point for research. Covering a wide range of topics including the nature of scientific data, modeling, and simulation, his book provides a detailed guide for those willing to look beyond ideological proclamations, and enriches our understanding of how climate science relates to important concepts such as chaos, unpredictability, and the extent of what we know.” (From the Publisher)

More information available [here](#).

Authors of HPS&ST-related papers and books are invited to bring them to attention of the Note’s assistant editors, Paulo Maurício at [paulo.asterix@gmail.com](mailto:paulo.asterix@gmail.com) or Nathan Oseroff at [nathanoserooff@gmail.com](mailto:nathanoserooff@gmail.com) for inclusion in these sections.

## Coming HPS&ST Related Conferences

April 26, 2018, Graduate Philosophy Conference, Department of Philosophy, National Taiwan University.

More information at: <http://ntu-graduate-philosophy-conference.webnode.tw/>

May 3-4, 2018, 7th Annual University of Calgary Graduate Philosophy Conference. University of Calgary, Alberta, Canada.

Details at: <https://ucalgarygradconference.wordpress.com/>

May 10-11, 2018, 2nd International Conference on Bioethics in the New Age of Science, Szeged, Hungary.

Details at: <http://www.bnas2018.org/>

May 12-13, UK Antiquarian Horological Society, annual meeting, Keele University, Staffordshire.

Details at: <http://www.ahsoc.org/events/annual-meeting/>

May 14-17, 2018, Fifth International Conference on the Nature and Ontology of Spacetime, Albena, Bulgaria.

More information at: <http://www.minkowskiinstitute.org/conferences/2018/>

May 16-18, 2018, V Colombian Conference on Logic, Epistemology and Philosophy of Science (PHILOGICA V), Villa de Leyva, Colombia

Details available [here](#).

May 17-18, 2018, Philosophy of Biology at the Mountains (POBAM), University of Utah, Salt Lake City, US.

Details at: <https://sites.google.com/view/pobam/home>

May 17-20, 2018, The 8th Annual Values in Medicine, Science, and Technology Conference. The University of Texas at Dallas, Richardson, Texas, USA

Details at: <http://www.utdallas.edu/c4v/2018-conference/>

May 18-20, 2018, 46th annual meeting of the Society for Exact Philosophy. University of Connecticut, USA

More information at: <http://www.phil.ufl.edu/SEP/meeting/2018/index.html>

May 23-25, 2018, Workshop on Explanation and Understanding. Ghent University

More information at: <http://www.lrr.ugent.be/explanationunderstanding/>

May 24-26, 2018, 4th International Workshop on Historical Epistemology: Historical epistemology and the disunities of the sciences. Université Paris 1 Panthéon-Sorbonne

More information at: <https://episthist.hypotheses.org/1016>

May 26-28, 2018, CSHPS Annual Meeting, Regina, Canada

Details at: <http://www.yorku.ca/cshps1/meeting.html>

May 28-30, 2018, Closing International Workshop: Democratisation of science – epistemological issues and new perspectives. Université de Lyon, France

More information at: <https://tinyurl.com/y7vbrewt>

May 31, June 1, 2018, Is Religion Natural?, Centre for Ethics and the Centre Pieter



- Gillis, University of Antwerp (Belgium)  
Inquiries with Esther Kroeker: [esther.kroeker@uantwerpen.be](mailto:esther.kroeker@uantwerpen.be).
- June 1-2, 2018, Fake Knowledge, Department of Philosophy, University of Cologne, Germany.  
More information: Dr. Amy Flowerree ([aflowerr@uni-koeln.de](mailto:aflowerr@uni-koeln.de)) Abstract submission: March 15, 2018.
- June 4-6, 2018, Consortium for Socially Relevant Philosophy of/in Science and Engineering (SRPOISE) 4th Conference, Academy of Medicine at Georgia Tech, Atlanta, USA  
Details at: <http://srpoise2018.weebly.com>
- June 4-7, 2018, Canadian Philosophical Association: 2018 Annual Congress. Montreal, Quebec, Canada  
More information at: <https://www.acpcpa.ca/cpages/home-page>
- June 7-8, 2018, The Spirit of Inquiry in the Age of Jefferson. American Philosophical Society, Philadelphia.  
Details at: <https://www.amphilsoc.org/spirit-inquiry-age-jefferson>
- June 11-13, 2018, Models of Explanation. 11th Munich-Sydney-Tilburg/Turin (MuST) Conference in Philosophy of Science. University of Turin.  
Details at: <https://modelsofexplanation.wordpress.com/>
- June 14-15, 2018, Explanatory Power. A workshop in the DACH project: Inferentialism, Bayesianism, and Scientific Explanation. University of Geneva.  
More information at: [http://www.unige.ch/lettres/philo/files/1114/9917/0204/Explanatory\\_Power.pdf](http://www.unige.ch/lettres/philo/files/1114/9917/0204/Explanatory_Power.pdf)  
Inquiries to: [lorenzo.casini@unige.ch](mailto:lorenzo.casini@unige.ch)
- June 14-16, 2018, Phenomenological Approaches to Physics Historical and Philosophical Perspectives, University of Graz, Austria  
Details at: <http://phenphysics.weebly.com/>

- June 18-20, 2018, Society of European Philosophy and Forum for European Philosophy Annual Conference, University of Essex, UK.  
More information available [here](#).
- June 18-20, 2018, 5th Annual Conference of the International Association for the Philosophy of Time (IAPT), Seoul, South Korea.  
More information at: <https://iapt5seoul.weebly.com/>
- June 19-21, 2018, 7th annual conference of the Society for the Study of the History of Analytical Philosophy (SSHAP 2018), Hamilton, Ontario  
More information at: <http://sshap.org/category/meetings/annual-meetings/>
- June 22-24, 2018, Bertrand Russell Society Annual Meeting 2018, McMaster University in Hamilton, Ontario  
More information at: <http://bertrandrussell.org/annual-meeting-2018/>
- June 22-23, 2018, Computational Modelling in Philosophy (CMP). Munich Center for Mathematical Philosophy (MCMP) - LMU Munich.  
Details at: <https://tinyurl.com/y9tpvq9m>
- June 27-29, 2018, Reconceiving Cognition, Antwerp, Belgium  
More information at: <https://www.uantwerpen.be/en/rg/filop/reconceiving/>
- June 27-29, 2018, Measurement at the Crossroads. University Paris Diderot, France.  
Details at: <https://measurement2018.sciencesconf.org/>
- June 29-July 1, 2018, Annual Conference of the Society for Applied Philosophy. Utrecht, The Netherlands.  
More information available [here](#).
- June 30-July 2, 2018, 7th SPSP Congress, Ghent University, Belgium  
Details, Erik Weber, [Erik.Weber@UGent.be](mailto:Erik.Weber@UGent.be).
- July 2-4, 2018, 3rd International Conference on Science and Literature, Paris.  
Details, George N. Vlahakis, [gvlahakis@yahoo.com](mailto:gvlahakis@yahoo.com).

- July 3-6, 2018, 9th Conference of the International Society for the Study of Argumentation (ISSA), University of Amsterdam, The Netherlands  
Details at: <https://www.conftool.net/issa2018/>
- July 4-6, 2018, VIIème Congrès de la Société de Philosophie des Sciences, Nantes, France.  
Details at: <https://congressps.sciencesconf.org/resource/page/id/1>
- July 4-6, 2018, BSPS 2018 Annual Conference, University of Oxford, UK  
More information available [here](#).
- July 5-7, 2018, The Evolution of Knowledge. &HPS7: Integrated History and Philosophy of Science, 7th conference. Leibniz Universität Hannover, Hannover, Germany  
Inquiries to: Uljana Feest [feest@philos.uni-hannover.de](mailto:feest@philos.uni-hannover.de)  
Or, Ohad Parnes [oparnes@mpiwg-berlin.mpg.de](mailto:oparnes@mpiwg-berlin.mpg.de)
- July 9-11, 2018, FAPSA 2018 Conference: The Future of Philosophy in Schools. The University of Notre Dame, Fremantle, Australia.  
Details available [here](#).
- July 9-12, 2018, HOPOS 2018 International Conference, Groningen, the Netherlands  
Details at: <http://www.hopos2018.nl/>
- July 16-18, 2018, Annual Conference of the International Society for the Philosophy of Chemistry (ISPC). Department of Philosophy, University of Bristol, UK  
Inquiries to [gb0859@bristol.ac.uk](mailto:gb0859@bristol.ac.uk)  
More information at: <https://sites.google.com/site/socphilchem/>
- July 17-19, 2018, Eight International Conference on Language, Culture and Mind.  
Venue: Denison University in Granville, Ohio, USA  
Details at: <https://conferences.denison.edu/lcm8/>

July 17-21, 2018, International Committee for the History of Technology, 45th symposium, Jean Monnet University, Saint-étienne, France.

Further information at: <http://www.icohtec.org/annual-meeting-2018.html>

July 19-27, 2018, 2018 Summer Institute; From Biological Practice to Scientific Metaphysics. Taipei, Taiwan

Details available [here](#)

July 23-27, 2018, The 2018 Conference on Artificial Life (ALIFE 2018), Tokyo, Japan.

Details at: <http://2018.alife.org/>

July 28-August 1, 2018, American Association of Physics Teachers (AAPT), Annual Conference, Washington DC, USA.

Details at: [programs@aapt.org](mailto:programs@aapt.org)

July 29 – August 2, 2018, 25th Biennial Conference in Chemical Education, University of Notre Dame, Notre Dame, IN, USA

Details at: <http://bcce2018.org/Default.html>

August 5-11, 2018, 41st International Wittgenstein Symposium. Kirchberg am Wechsel, Austria.

Details at: [http://www.alws.at/index.php/symposium/view/call\\_for\\_papers/](http://www.alws.at/index.php/symposium/view/call_for_papers/)

August 20-21, 2018, First International Conference on Philosophy and Meaning in Life, Sapporo, Japan

More information at: <http://caep-hu.sakura.ne.jp/en/event/>

August 22-24, 2018, Society for the Metaphysics of Science (4th Annual Conference), Milan, Italy.

Further information: Christina Conroy at [c.conroy@moreheadstate.edu](mailto:c.conroy@moreheadstate.edu)

August 29 – 31, 2018, XI International Conference on History of Science and Science Education (ICHSSE), State University of Paraíba, Campina Grande, Brazil.

Information available [here](#).

August 29 – September 1, 2018, Society for Social Studies of Science – Transna-

tional STS, Sydney, Australia

Details at: [http://www.4sonline.org/item/4s\\_sydney\\_18\\_announced](http://www.4sonline.org/item/4s_sydney_18_announced)

September 3-5, 2018, 4th Latin American Conference of the International History, Philosophy and Science Teaching Group (IHPST-LA), Federal University of ABC, UFABC, Santo André, Brazil

Information at: <http://www.brenoam.com/ihpstla-2018-en>.

September 10-12, 2018, The Insides of Nature: Causalities, Causal Processes and Conceptions of Nature. Faculdade de Filosofia e Ciências Sociais Universidade Católica Portuguesa, Braga, Portugal

More information at: <http://braga.ucp.pt/filosofiadanatureza/eng.html#>

September 14-17, 2018, European Society for the History of Science Biennial Conference and British Society for History of Science annual conference, 'Unity and Disunity', University College London's Institute of Education, London, UK

More information at: <http://eshs2018.uk/index.php/call-for-papers/>

For further details please contact the Programme Co-ordinator, Frank James: [fjames@ri.ac.uk](mailto:fjames@ri.ac.uk).

September 17-20, 2018, Tenth international conference (GAP.10) of the German Society for Analytic Philosophy (GAP), Cologne, Germany

More information at: <https://gap10.de/en/>

September 26-28, 2018, Deuxième colloque de la SFHSH - Histoire des sciences humaines et sociales. Paris, France.

Details at: <https://sfhsh.hypotheses.org/1018>

October 2-6, 2018, XIII International Ontology Congress: Physics and Ontology. San Sebastian (University of the Basque Country) and Barcelona Autonomous University of Barcelona, Spain.

Details at: <http://www.ontologia.info/>

October 17-21, 2018, 3rd International Conference on the History of Physics under the auspices of the European Physical Society, Donostia-San Sebastian (Spain)

Details at: <http://www.ehu.es/ehusfera/hopdss2018/>

November 1-4, 2018, 26th Biannual Meeting of Philosophy of Science Association, Seattle, Washington.

More information available [here](#).

November 13-16, 2018, IX conference of the Spanish Society of Logic, Methodology and Philosophy of Science (SLMFCE), Madrid, Spain.

More information at: <http://www.solofici.org/congreso2018/>

November 15-17, 2018, 7th Making of the Humanities conference, University of Amsterdam, The Netherlands.

More information available [here](#).

November 23-28, 2018, East Asian Science Education Association (EASE) annual conference, National Dong Hwa University, Hualien Taiwan.

Details at: <http://new.theease.org/conference2018.php>

November 28-30, 2018, 29th Novembertagung on the History of Mathematics: “History of Mathematical Concepts and Conceptual History of Mathematics”, University of Seville, Spain.

Details available [here](#)

December 5-7, 2018, First Annual Meeting of The Australasian Society for Philosophy and Psychology, Macquarie University, Sydney, Australia.

Details available [here](#)

March 31-April 3, 2019, NARST Annual Conference, Baltimore, USA

Details at: <https://www.narst.org/>