# Boston Colloquium for Philosophy of Science

## www.bu.edu/cphs

#### Sunday, 4-6 pm III. Turing and Cryptography

Rational Proofs

- Silvio Micali Computer Science, MIT
- Turing and the Growth of Cryptography Ronald Rivest Computer Science, MIT

Alan Turing and Voice Encryption Craig Bauer Mathematics, York College of Pennsylvania

#### Monday, 9:30 am-12:15 pm

IV. Turing and AI Title TBA

Marvin Minsky Media Arts and Sciences, MIT Why Neanderthals Couldn't Pass Turing's Test and When Computers Will

Patrick Henry Winston Computer Science, MIT What's Wrong with the Moral Turing Test?

Matthias Scheutz Computer Science, Tufts University

**Embodying Computation at Higher Types S. Barry Cooper** Mathematics, University of Leeds

#### Monday, 2-4 pm

V. The Church-Turing Thesis

Normal Forms for Puzzles: An Enigmatic Variant of Turing's Thesis

Wilfrid Sieg Philosophy, Carnegie Mellon University Logical Egg or Computational Chicken?

- Jaakko Hintikka Philosophy, Boston University
- Is There a Church-Turing Thesis for Social Algorithms? Rohit Parikh Computer Science, Mathematics, Philosophy, CUNY

#### Monday, 4:15-6:30 pm

VI. Turing, Physics, and Probability Algorithmic Randomness and Turing's Work on Normality

**Rod Downey** Mathematics, Victoria University of Wellington

- Spacetime Physics and Non-Turing Computers Mark Hogarth Philosophy, Cambridge University Title TBA
  - Leonid Levin Computer Science, Boston University

## The Alfred I. Tauber Forum<sup>§</sup> Stereotype Threat: Philosophy, Psychology, and the Self<sup>\*\*</sup>

Friday, February 8, 2013 Terrace Lounge 2nd Floor, George Sherman Union 775 Commonwealth Ave.

#### 1-6 pm

Why Are There so Few Women in Philosophy? Louise Antony Philosophy, University of Massachusetts, Amherst

#### Title TBA

Greg Walton Psychology, Stanford University Stereotype Threat and Intentional Performance Ron Mallon Philosophy, Washington University, St. Louis Title TBA

Steven Spencer Psychology, University of Waterloo

Using Knowledge: Philosophical and Psychological Perspectives on Stereotype Threat

Tamar Gendler Philosophy, Yale University

S The annual Alfred I. Tauber Forum on Integrating Scientific Knowledge with Human Needs is named in honor of the Center's second director. For further details, see www.bu.edu/cphs/directors.

\* Supported by the Boston University Center for the Humanities.

## The Robert S. Cohen Forum<sup>††</sup> **The Science of Music: 150 Years Since Helmholtz's** *On the Sensations of Tone\*\**

Friday, March 22, 2013 Terrace Lounge 2nd Floor, George Sherman Union 775 Commonwealth Ave.

1-5 pm

The Reception of Helmholtz's *On the Sensations of Tone*: Celebrity vs. Enlightenment

David Cahan History, University of Nebraska, Lincoln Sympathetic Resonance: The Influence of Helmholtz's Theory of Acoustics

The Boston University Center for Philosophy & History of Science was founded in 1960 as an interdepartmental, interuniversity forum on the nature of science. For over 50 years the Colloquium has fostered the center's goal of building interdisciplinary bridges between the humanities and sciences by bringing together the world's leading scholars in the philosophy, history, and social studies of science in an annual lecture series.

## 40th Anniversary of the First Osgood Hill Conference on Quantum Gravity<sup>\*</sup>

Monday, October 15, 2012 Barristers Hall, Boston University School of Law 765 Commonwealth Avenue

#### 9 am-Noon

Introduction: Forty Years After John Stachel Center for Einstein Studies, Boston University The Meaning of Background Independence Tian Yu Cao Philosophy, Boston University Emergence: Some Key Physical Issues Bei-Lok Hu Physics, University of Maryland The Problem of Space in Quantum Gravity Christian Wüthrich Philosophy, Science Studies,

UC San Diego

Simplicial Gravity and Strings John Swain Physics, Northeastern University

#### 2-5 pm

Some Features of a Good Quantum Gravity Theory George Ellis Mathematics, University of Cape Town

#### **Quantum Gravity Phenomenology**

Giovanni Amelino-Camelia Physics, University of Rome La Sapienza

Meaning and Measurement in Quantum Gravity

John Stachel Center for Einstein Studies, Boston University

#### **Unimodular Conformal and Projective Relativity**

Kaća Bradonjić Physics, Wellesley College

\* Co-sponsored by the Center for Einstein Studies, this event commemorates the Osgood Hill Conferences on quantum gravity. For more information, please see www.bu.edu/cphs.

### **Turing 100**<sup>+</sup>

Sunday, November 11, and Monday, November 12, 2012 Photonics Center, 9th Floor Colloquium Room 8 St. Mary's Street, Room 906

#### Sunday, 10 am-Noon

I. Turing's Philosophical and Logical Foundations

On Formalism Freeness: A Meditation on Gödel's 1946 Princeton Bicentennial Lecture

Juliette Kennedy Mathematics and Statistics, University of Helsinki

Turing, Church, Gödel: A Personal Perspective

Michael Rabin Computer Science, Harvard University

#### **Turing and Wittgenstein**

Juliet Floyd Philosophy, Boston University

#### Sunday, 1:45-3:45 pm

II. Turing and Mathematics: Computability and Definability

#### Universality Is Ubiquitous

Martin Davis Courant Institute, NYU; Mathematics, UC Berkeley

#### **Collapsing Sentences**

Gerald Sacks Mathematics, Harvard University and MIT The Hierarchy of Definability: An Extended Thesis Theodore Slaman Mathematics, UC Berkeley † Co-sponsored by the Rafik B. Hariri Institute for Computing and Computational Science & Engineering and the Department of Computer Science.

## How Can the History and Philosophy of Science Contribute to Contemporary U.S. Science Teaching?<sup>\*</sup>

Friday, December 7, 2012 Photonics Center, 9th Floor Colloquium Room 8 St. Mary's Street, Room 906

#### 9-10:10 am

Panel I: History of HPS in Science Education

10:15-11:25 am
Panel II: HPS, Cognition, and Science Learning

11:30 am-12:40 pm Panel III: HPS and the Science Frameworks

#### 2:15-3:25 pm

Panel IV: HPS in the Classroom: Objectives, Materials, and Methods

#### 3:30-4:40 pm

Panel V: HPS in the Classroom: Outcomes with Students

#### 4:45-5:55 pm Panel VI: HPS in Professional Development

Co-sponsored by the Boston University School of Education. We gratefully acknowledge the support of a REESE grant from the National Science Foundation. Lydia Patton Philosophy, Virginia Tech

Pitched Battles: Helmholtz, Rayleigh, and Beyond

Eric J. Heller Chemistry, Physics, Harvard University

Musical Illusions, Perfect Pitch, and Other Mysteries

Diana Deutsch Psychology, UC San Diego

†† The annual Robert S. Cohen Forum on Contemporary Issues in Science Studies is named in honor of the Center's cofounder and first director. For further details, see www.bu.edu/cphs/directors.

\*\* Supported by the Boston University Center for the Humanities.

The Karbank Symposium in Environmental Philosophy#

## A Symposium on John Broome's Climate Matters: Ethics in a Warming World

Thursday, April 11, 2013 The Castle, 225 Bay State Road

2-6 pm

John Broome Philosophy, University of Oxford with Commentators

\*\* The Karbank Symposium in Environmental Philosophy is named in honor of Steven Karbank, an alumnus and generous benefactor of the Philosophy Department and this symposium.

For further information and updates, visit our website: **www.bu.edu/cphs** 

All lectures are free and open to the public. Selected proceedings of the colloquia are published by Springer in the series *Boston Studies in the Philosophy of Science*.

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