Biographer Andrew Hodges and distinguished panelists discuss the enigma who was mathematician and cryptographer Alan Turing

WHAT: “Alan Turing: A Centenary Celebration.” Alan M. Turing (1912–1954) was a mathematician, logician, cryptanalyst, and computer scientist. In honor of this pioneer of our digital age, the Mathematical Sciences Research Institute and the Simons Institute for the Theory of Computing are presenting a lecture by Andrew Hodges, the author of the acclaimed biography Alan Turing: The Enigma (newly issued this year in a Centenary edition), followed by a panel discussion. Turing formalized the concepts of “algorithm” and “computation” via the Turing machine, providing a blueprint for the electronic digital computer, and is widely considered to be the father of computer science and artificial intelligence. In a celebration of the centenary of Turing’s birth, the evening’s discussion will explore his life and work, as well as his ongoing influence on current research in logic, computer science, complexity, and biology.

WHO: The distinguished panelists include Martin Davis (Courant Institute), Andrew Hodges (University of Oxford), Don Knuth (Stanford University), Peter Norvig (Google), Dana Scott (Carnegie Mellon University), and Luca Trevisan (Stanford University). Richard Karp, Founding Director of the Simons Institute for the Theory of Computing, will moderate.

WHEN: TUESDAY, SEPTEMBER 4, 2012, from 6:00 pm to 8:30 pm.

WHERE: Berkeley City College’s Auditorium at 2050 Center Street (near the Downtown Berkeley BART station on Shattuck Avenue; for a map, see http://goo.gl/0vJRT) in Berkeley.

WEBPAGE: See www.msri.org/turing/

HOW: FREE ADMISSION.

SPONSORS: The Mathematical Sciences Research Institute (MSRI) and the Simons Institute for the Theory of Computing.

The Mathematical Sciences Research Institute (MSRI, http://www.msri.org), in Berkeley, California, is one of the world’s preeminent centers for research in the mathematical sciences and has been advancing mathematical research through workshops and conferences since its founding as an independent institute in 1982. Approximately 2,000 mathematicians visit the MSRI each year, and the Institute hosts about 85 leading researchers at any given time for stays of up to one academic year. The Institute has been funded primarily by the National Science Foundation with additional support from other government agencies, private foundations, corporations, individual donors, and more than 90 academic institutions. The MSRI is involved in K-12 math education through its annual Critical Issues in Mathematics Education conferences for educators, math circles, Julia Robinson Math Festivals, the National Association for Math Circles and its website (NAMC, www.mathcircles.org), and Olympiad math competitions; in undergraduate education through its MSRI-UP program; and in public education through its “Conversations” series and a variety of public events.

The Simons Institute for the Theory of Computing at UC Berkeley was established on July 1, 2012, with a grant of $60 million from the Simons Foundation. The Simons Institute will convene top computer theorists and researchers from around the globe to explore the mathematical foundations of computer science and extend them to fields as diverse as mathematics, statistics, physics, astronomy, economics, and biology. The Institute will offer researchers a computational lens through which to explore new challenges relevant to everyday life, such as fighting diseases and making social and commercial interactions on the Internet more secure and efficient. The insights gained in this way will often reflect back to the theory of computation, opening new directions and advancing our understanding of fundamental issues in core complexity theory and algorithms. With inaugural programs beginning in 2013, the Simons Institute will bring to Berkeley many of the world’s leading researchers, as well as the next generation of outstanding graduate students and postdoctoral scholars, to work on computational topics in workshops, seminars, and informal collaborations.