

MEDIA ADVISORY

The first five kilobytes are the hardest- George Dyson to speak at Congress 2013

June 5, 2013 - Victoria— Evolution in the digital universe has been driven, since the beginning, partly by improvements in code and partly by improvements in machines. Alan Turing's one-dimensional model of universal computation of 1936 led directly to John von Neumann's 5-kilobyte, two-dimensional implementation of 1946. The resulting address matrix, still in place after sixty years, is how the machines know where to find the code, and how the code knows where to find the machines. Mapping real-world correspondence to data structures populating a storage matrix currently expanding by some 5 trillion bits per second is the challenge that brings us here

George Dyson is a historian of technology whose interests have lead him to pen books on the development (and redevelopment) of the Aleut kayak (*Baidarka: The Kayak*, 1986), the evolution of digital computing and telecommunications (*Darwin Among the Machines*, 1997), and a path not taken into space (*Project Orion*, 2002). His latest book, *Turing's Cathedral: The origins of the digital universe*, illuminates the transition from numbers that mean things to numbers that do things in the aftermath of World War II.

What? George Dyson's "Big Thinking" lecture
"The first five kilobytes are the hardest"

Where? Farquhar Auditorium, University Centre, University of Victoria

When? June 6, 2013, 12:15 -1:20 p.m.

The [Big Thinking](#) lecture series is presented by the [Federation for the Humanities and Social Sciences](#) and the [University of Victoria](#). Supporting sponsors are the [Association of Universities and Colleges of Canada](#) and the [Canada Foundation for Innovation](#).

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About the Congress of the Humanities and Social Sciences

Organized by the Federation for the Humanities and Social Sciences, Congress is the largest interdisciplinary conference in Canada. Described as a “conference of conferences,” Congress involves nearly 70 academic associations that represent a rich spectrum of disciplines in the humanities and social sciences, including literature, history, theatre, film studies, education, music, sociology, geography, social work and many others.