How the Cold War Transformed Science

California Institute of Technology
Dabney Hall, Treasure Room
May 7 - 9

In the mid 1960s, two of the most distinguished contemporary historians of modern physics, Daniel J. Kevles and Paul Forman, debated the impact of the Cold War on American physics. Forman suggested that military funding had dramatically altered the nature of physics, qua physics, causing its practitioners to shift from an earlier goal of fundamental understanding of the laws of nature toward a physics of gadgeteering preoccupied with technical prowess (Forman, 1987, 1993, 1996). Kevles, in contrast, argued that despite pervasive military patronage, American physicists made their own choices and retained control of their intellectual agenda (Kevles, 1990). But what did physicists - and other scientists - decide to do in the Cold War and how were those decisions shaped? The premise of this conference is that the Cold War did transform science, and not just in American physics. Our goal is to explore how the Cold War shaped both what we learned and what we did not learn about the natural world at this time. In exploring this question, for the specific period we call the Cold War, we may also come to a better understanding of how politics and culture shape scientific knowledge more generally.

Participants/Topics

Brief statements will be made by participants, followed by discussion.

Welcome and Introduction
Naomi Oreskes, University of California, San Diego

Science in the Global Cold War
John Krige, Georgia Institute of Technology

Calculating Times: Radar, Ballistic Missiles, and Einstein’s Relativity
David Kaiser and Benjamin Wilson, Massachusetts Institute of Technology

Soviet Nuclear Physics and Reactor Engineering during the Cold War
Sonja Schmid, Virginia Tech

“To Reach the Moon”; Soviet Big Science and the Cold War
Asif Siddiqi, Fordham University

Angela Cresger, Princeton University

Resistance and Reaction in Cold War Chemistry
Matthew Shindell, University of California, San Diego

How the Cold War Transformed Earth Science
Erik M. Conway, Jet Propulsion Laboratory and
Naomi Oreskes, University of California, San Diego

How Does Cold War Science Look from the Perspective of Chinese History?
Sigrid Schmalzer, University of Massachusetts, Amherst and
Zuoyue Wang, California State Polytechnic University, Pomona

Towards Fusion: Atoms for Peace and Physics in India, 1953 - 1959
Jahnnavi Phalkey, Imperial College, University of London

How the Cold War Transformed Soviet History of Science
Elena Aronova, University of California, San Diego

The Cold War Roots of the Intelligent Design Movement
George Reisch, Open Court Publishing Company

Have We Solved the Miasma Problem? If Not, Does it Matter?
Naomi Oreskes, University of California, San Diego