

Wednesday, April 14, 2010 7 pm

**Forbes Library, 20 West Street
Northampton MA**

**THE AGE OF ENTANGLEMENT
When Quantum Physics Was Reborn**

A Talk by Author Louisa Gilder

Although about one-third of the world's economy depends on quantum mechanics to operate, most of us know so little about it that it still sounds like science fiction to a great many people.

Entanglement is a fundamental process in quantum physics that Albert Einstein dubbed "spooky action at a distance." In a 1935 paper, Einstein predicted that such a phenomenon existed. But it was not until 1964 that Irish physicist John Bell published a ground-breaking paper that established theoretically the phenomenon of entanglement. And it wasn't until the experiments of John Clauser in the 1970s and French physicist Alain Aspect in the 1980s that the reality of entanglement was established in the lab.

Ms. Gilder, a graduate of Dartmouth College, is a wonderful speaker who has written a great book. *The New York Times* called *The Age of Entanglement* "a sparkling, original book" and it was one of only five science books listed among their Notable Books of 2009. *Science* described it as "witty, charming, and accurate." And *Nature* has said it is "a delightfully unconventional history." Best-selling author Matt Ridley wrote that Ms. Gilder's book is so well-written that it made him feel for a moment that he almost understood quantum mechanics! Ms. Gilder's work has also been praised as "historically sound and seamlessly constructed;" "deep, beautiful and thoroughly original;" and "a movingly human and surprisingly accessible picture of the unveiling of the quantum universe" (*Chicago Tribune*); We hope you can join us for a fascinating talk that will help make quantum science—and the passionate physicists who created it--more comprehensible and more appreciated.