The End of Physics? - The Beginning of Physics?

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Introduction

- The End of Physics? The End of Science?
- The interplay between Science and Technology
- New Physics at the end of the 20th Century
- Into the 21st Century
- Back to the Future
- The Young Achievers

The End of Physics? The End of Science?

- Stephen Hawking *Is the End in Sight for Theoretical Physics?*
- David Lindley *The End of Physics, The myth of a unified theory*
- John Horgan *The End of Science*
- Galileo and Newton - Mechanics - telescope
- Faraday and Maxwell - electromagnetism - electrical instruments
- *I am never content until I have constructed a mechanical model of what I am studying. If I succeed in making one, I understand; otherwise I do not* Lord Kelvin
- *The whole subject of electrical radiation seems working itself out most splendidly* Oliver Lodge (1888)

Predictions?

- Stephen Weinberg *A Unified Physics by 2050?*
- Hans Bethe *A hundred years ago, some of the great physicists in England and Continental Europe predicted that physics was at an end. We know what actually happened...Looking at the predictions of 100 years ago, it would be foolish to make predictions for the next 100 years*
- Sir John Maddox *The most important discoveries of the next 50 years are likely to be the ones of which we cannot now even conceive*

The interplay between Science and Technology

- Science and technology, while inherently different both in terms of their practioners and in their methodology are nevertheless dependent upon each other.
- The discovery of the electron could not have taken place prior to the means of producing a vacuum.
- Otto von Guericke's spectacular public demonstration in 1650 was an essential step on the road to the electronic age. And to a host of modern technology.