

# Physics History

Read two APS News “This Month in Physics History” articles, and write a short response. The main goals of this assignment are for you to (1) become more literate in physics by learning about its history and (2) to give you some practice reading and writing about science.

Before next week’s lab, please complete the following steps.

1. Look through the list of articles provided, and choose two that seem interesting to you.
2. Read the articles.
3. Write a short response to the two articles. One long paragraph is sufficient.
  - Summarize each article’s main points in a sentence or two. Be sure to include the names of the articles.
  - Comment on aspects of each article that you found particularly interesting or surprising.
    - You might mention:
      - Why did you choose to read the article?
      - Were you reminded of anything that you have seen in class?
      - Were you reminded of anything that you have experienced in your daily life?
  - Compare and contrast an aspect of the two articles.
    - You might discuss:
      - Were the lives of the scientists similar?
      - How were the discoveries received by the scientific community?
      - Are there any connections in the physics discussed?

Your response can be neatly handwritten or typed, and it is **to be handed in at the beginning of next week’s lab**. We expect you will be able to finish it or at least get a good start on it during today’s lab.

# History Reading List 1

## Current Events and Indirect Measurement

*For your first article, choose at least one these two articles.*

**May 29, 1919: Eddington Observes Solar Eclipse to Test General Relativity**

<http://www.aps.org/publications/apsnews/201605/physicshistory.cfm>

**June, ca. 240 B.C. Eratosthenes Measures the Earth**

<http://www.aps.org/publications/apsnews/200606/history.cfm>

*For your second article, either read the other suggested reading above or pick from the full reading list below.*

**December 1706: Birth of Émilie du Châtelet**

<http://www.aps.org/publications/apsnews/200812/physicshistory.cfm>

**Circa June 1748: Publication of Analytical Institutions**

<http://www.aps.org/publications/apsnews/201006/physicshistory.cfm>

**Circa May 1816: Germain Forms Theory of Elastic Surfaces**

<http://www.aps.org/publications/apsnews/200405/history.cfm>

**October 1847: Maria Mitchell Discovers a Comet**

<http://www.aps.org/publications/apsnews/200610/history.cfm>

**November 1872: Death of Mary Somerville**

<http://www.aps.org/publications/apsnews/200211/history.cfm>

**June 1876: Edward Bouchet becomes the first African American PhD in physics**

<http://www.aps.org/publications/apsnews/200706/history.cfm>

**March 23, 1882: Birth of Emmy Noether**

<http://www.aps.org/publications/apsnews/201303/physicshistory.cfm>

**December 1898: The Curies Discover Radium**

<http://www.aps.org/publications/apsnews/200412/history.cfm>

**July 13, 1901: Santos-Dumont Flies Around Eiffel Tower**

<http://www.aps.org/publications/apsnews/200407/history.cfm>

**Einstein's Biggest Blunder**

<http://www.aps.org/publications/apsnews/200507/history.cfm>

**January 15, 1919: Physics and the Boston Molasses Flood**

<http://www.aps.org/publications/apsnews/201701/physicshistory.cfm>

**November 1919: Elmer Imes Publishes Work on Infrared Spectroscopy**

<http://www.aps.org/publications/apsnews/200811/physicshistory.cfm>

**January 1, 1925: Cecilia Payne-Gaposchkin and the Day the Universe Changed**

<http://www.aps.org/publications/apsnews/201501/physicshistory.cfm>

**February 1928: Raman Scattering Discovered**

<http://www.aps.org/publications/apsnews/200902/physicshistory.cfm>

**March 16, 1938: Katharine Blodgett Patents Anti-Reflective Coatings**

<http://www.aps.org/publications/apsnews/200703/history.cfm>

**December 1938: Discovery of Nuclear Fission**

<http://www.aps.org/publications/apsnews/200712/physicshistory.cfm>

**February 11, 1939: Meitner/Frisch Paper on Nuclear Fission**

<http://www.aps.org/publications/apsnews/201502/physicshistory.cfm>

**June 1941: Hedy Lamarr and George Antheil Submit Patent for Radio Frequency Hopping**

<http://www.aps.org/publications/apsnews/201106/physicshistory.cfm>

**October 8, 1945: First Patent for the Microwave**

<http://www.aps.org/publications/apsnews/201510/physicshistory.cfm>

**August 1948: Maria Goeppert Mayer and the Nuclear Shell Model**

<http://www.aps.org/publications/apsnews/200808/physicshistory.cfm>

**January 23, 1952: Alan Turing's House is Burglarized**

<http://www.aps.org/publications/apsnews/201401/physicshistory.cfm>

**February 1968: The Discovery of Pulsars Announced**

<http://www.aps.org/publications/apsnews/200602/history.cfm>

**January 22, 1980: Soviet Dissident Andrei Sakharov Arrested**

<http://www.aps.org/publications/apsnews/201601/physicshistory.cfm>

**November 10, 1986: Death of Leona Woods Marshall Libby**

<http://www.aps.org/publications/apsnews/201411/physicshistory.cfm>

**December 14, 1989: Death of Andrei Sakharov**

<http://www.aps.org/publications/apsnews/200212/history.cfm>

**October 22, 2004: Discovery of Graphene**

<http://www.aps.org/publications/apsnews/200910/physicshistory.cfm>

**Women and the Nobel Prize in Physics**

<http://www.aps.org/publications/apsnews/201312/physicshistory.cfm>