Arthur Holly Compton

(1892 - 1962)

Ph.D. Princeton 1916³

Dissertation: The intensity of x-ray reflection, and the distribution of the electrons in atoms. ³

1927 Nobel Prize in Physics "for his discovery of the effect named after him" $^{\rm 2}$

Advisor: Hereward Lester Cooke ^{1,3}

Students: Luis Walter Alvarez ^{5,6,7} Joyce Alvin Bearden ^{1,4}

Notes:

¹ Email communication with P Mao (17 Sep 2007)

- ² Physics 1927. <u>http://nobelprize.org/nobel_prizes/physics/laureates/1927/</u> (accessed 24 Sep 2007).
- ³ Compton, A.H. The intensity of x-ray reflection, and the distribution of the electrons in atoms. *Physical Review* **1917**, *9*, 29-57.

"My thanks are due to Professor H.L. Cooke for his helpful interest in this research."

⁴ Bearden, J.A. Measurements and interpretation of the intensity of x-ray reflection from sodium chloride and aluminium. Ph.D. Thesis, University of Chicago, 1926.

"In conclusion the writer wishes to express his appreciation to Professor A.H. Compton for his advice and assistance in this work."

⁵ Alvarez, L.W. The diffraction grating at grazing incidence. *Journal of the Optical Society of America* **1936**, *26*, 343-346.

"In conclusion, the author wishes to thank Professors H.G. Gale, A.H. Compton, and Carl Eckart for many helpful discussions of various aspects of the problem."

- ⁶ HEPNames Search. <u>http://www.slac.stanford.edu/spires/hepnames/</u>. (accessed 30 Jul 2009). Luis Alvarez.
- ⁷ Trower, W.P. Luis Walter Alvarez 1911-1988. *Biographical Memoirs of the National Academy of Sciences* **2009**, *92*, 1-22.

http://books.nap.edu/html/biomems/lalvarez.pdf. (accessed 30 Jul 200).

"When the recent Nobelist Arthur Holly Compton arrived at Chicago and learned of Luie's success with Geiger tubes, he proposed that they work together to determine the nature of the primary cosmic radiation."

"Compton's generosity toward his graduate student was faithfully practiced by Luie throughout his life when handing out recognition to his collaborators and students."