## Labs and Demos of Einstein's 1905 Papers

Monday, Jan 10, 2005 3:30 - 5:00 PM

(i) Brownian Motion: Kyle Forinash physics.ius.edu

There were many explanations of Brownian Motion before Einstein. Louis Bachelier had the same correct mathematical derivation as Einstein in 1900, but did not publish his Ph. D. thesis.

Resources for physics education, including applets, can be found at <a href="http://www.opensourcephysics.org/">http://www.opensourcephysics.org/</a>.

Brownian motion is used in medical imaging for edge detection. Cancer cells have different edge characteristics from normal cells.

(ii) Gravity Lensing and other demos: Dean Hudak, Brown University.

Visit www.physics.brown.edu/physics/userpages/staff/Dean\_Hudak/index.html.

(iii) Empirical Study of the Photoelectric Effect: Jeffrey Klenzing, University of Dallas.

Visit www.utdallas,edu/~jeffk