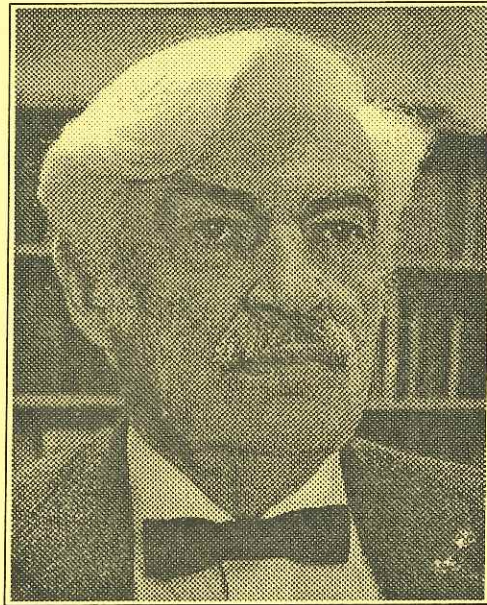


*University of Wisconsin–Madison
Physics Department*

1992 JULIAN E. MACK LECTURE

*Weighing Photons —
The Story of an Experiment*



Robert V. Pound

Mallinckrodt Professor Emeritus, Harvard University

For almost fifty years after Einstein proposed the three “critical tests” of his General Theory of Relativity, conclusive experimental confirmations remained elusive. Efforts to confirm the “gravitational redshift” by astronomical observations of solar and stellar spectra yielded equivocal results. In 1959, a gamma-ray resonance phenomenon was recognized as having the potential to obtain sufficient resolution to measure the predicted minute effect of gravity on photons in the laboratory. This talk will describe the excitement, frustrations, personal interactions, and discoveries that accompanied the successful carrying out of such a project.

Friday, May 1, 1992

~~4:30 P.M.~~ • 1300 Sterling Hall

4:00