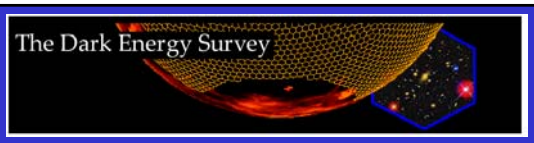
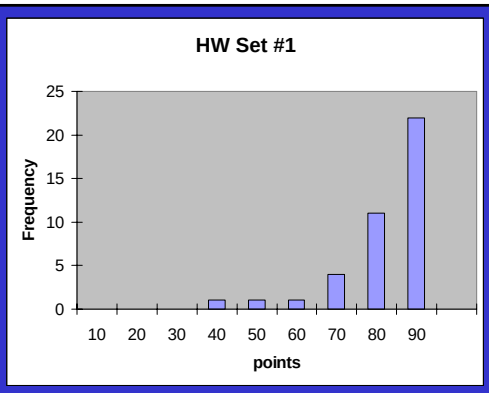


Attention: Engineering and/or Physics Students

The DES (Dark Energy Survey) research group at the University of Michigan is seeking a motivated undergraduate student to be involved in a hardware oriented research project in our lab. This project involves the evaluation of read-out electronics for large-format CCDs as well as measuring typical CCD characteristics such as read-noise and charge transfer efficiency. Those CCDs will be used in the Dark Energy Survey camera which will study dark energy properties through galaxy cluster and weak lensing measurements.

Student should have some knowledge of basic electronics and should have interest in the testing of electronic circuits, experimental prototyping (including soldering and wiring), and the control of electronics through computers. Some basic knowledge of Python and Linux is desirable.

Contact: Wolfgang Lorenzon or Michael Schubnell (schubnell@umich.edu)
bring a resume along!

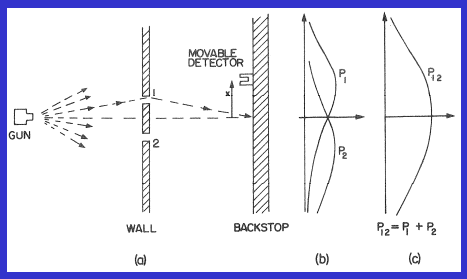


Average: 78/90 Median: 82/90 Full score: 3

Physics 390
Winter 2006

Two-Slit Experiments

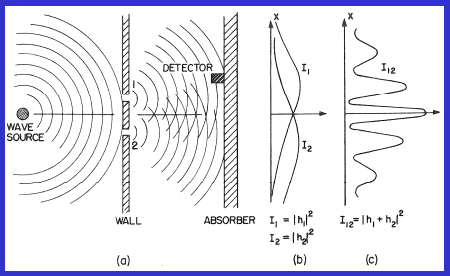
Bulletts



Bullets are indestructible → observe only whole bulletts

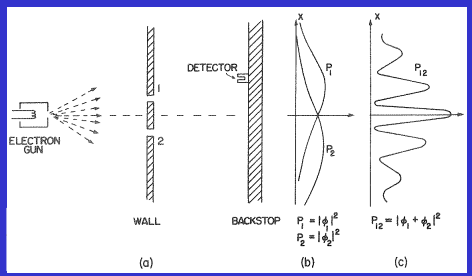
Experimental Result: $P_{12}(x) = P_1(x) + P_2(x)$

Water Waves



Experimental Result: $I_{12}(x) = I_1(x) + I_2(x) + 2\sqrt{I_1 + I_2}\cos\theta$

Electrons



Experimental Result: $P_{12}(x) = \left|\phi_1(x) + \phi_2(x)\right|^2$