

degree of focusing with bent crystals. Furthermore one may use the Bragg reflection from thin crystals to separate the γ rays emitted without recoil from all others. In this way irrelevant background γ rays could be eliminated from the detector.

Total external reflection of low-energy γ rays at grazing angles of incidence offers a possibility of a "light-pipe" to increase the effective solid angle that the scatterer subtends at the source. Within the limits set by the small angle of total reflection, this pipe need not be optically straight.⁴

The fixed baseline used for an experiment of this type reduces unwanted Doppler shifts to only those resulting from thermal, seismic, or simi-

lar disturbances. To equal the predicted gravitational shift the fractional change required in the height difference is 3.27×10^{-8} per second. Perturbing effects must be kept well below this value but this is also true for the other methods of measuring the red shift. Relative motion could be separated from the red shift by simultaneous observations of beams traveling in both directions.

¹R. L. Mössbauer, *Z. Physik* **151**, 124 (1958); *Naturwissenschaften* **45**, 538 (1958); *Z. Naturforsch.* **14a**, 211 (1959).

²Craig, Dash, McGuire, Nagle, and Reiswig, *Phys. Rev. Letters* **3**, 221 (1959).

³Lee, Meyer-Schutzmeister, Schiffer, and Vincent, *Phys. Rev. Letters* **3**, 223 (1959).

⁴We wish to thank E. M. Purcell for this suggestion.

E R R A T U M

DISLOCATION PINNING IN *n*-TYPE GERMANIUM. R. L. Cummerow and A. R. Cherry [*Phys. Rev. Letters* **3**, 367 (1959)].

Because it was thought that the diffusion coefficient of As in Ge is much smaller than it is, the experimental results presented in this Letter were interpreted in terms of Mott pinning (pinning

of dislocations dragged through a field of immobile impurity atoms). This interpretation is valid for samples deformed in a few seconds time at 500°C, but at the annealing temperatures used (600°C and above), the more familiar Cottrell pinning (mobile impurity atom migrating to a fixed dislocation) is operating.