

properly shielded from fast neutrons would have a background  $\text{Ar}^{37}$  production rate at least a factor of ten below the expected rate from solar neutrinos. It should be noted that if a positive result were obtained from such an experiment there would remain a small ambiguity in interpretation because of the possibility of a galactic source of neutrinos. A possible method of distinguishing between solar and galactic neutrinos would be to take advantage of the eccentricity of the earth's orbit and measure the 7 percent difference in solar neutrino intensity between aphelion and perihelion. With a signal as low as 7 per day (a total of 350  $\text{Ar}^{37}$  atoms) such an experiment would be marginal, but if a somewhat higher signal was observed such a test would be possible.

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