

References

1. R. Davis Jr., Radioisotopes in Scientific Research, Vol. 1 (Proc. 1st UNESCO Intl. Conf., Paris, 1957) Pergamon Press: London, New York and Paris, 1958.
2. J. Bahcall, preceding paper.  
  
If only ground state transitions are considered a solar neutrino capture rate in  $10^5$  gallons of  $C_2Cl_4$  from  $Be^7$  and  $B^8$  neutrinos would be 0.6 and 0.3 per day. An additional contribution to the rate of 5.7 per day would be expected from  $B^8$  neutrinos captured to form excited states in  $Ar^{37}$  (approximately  $\frac{50}{\text{percent}}$  error in flux). It is the contribution from excited states that produces an amount of  $Ar^{37}$  in  $10^5$  gallons of  $C_2Cl_4$  well above that expected from background effects.
3. The chemical division of the Pittsburgh Plate Glass Co. kindly allowed us to use their limestone mine at Barberton, Ohio for this experiment. A more complete report will be published.
4. L. W. Alvarez, UCRL 328 (1949).
5. R. Davis Jr. and D. S. Harmer, to be published.
6. P. H. Barrett, L. M. Bollinger, G. Cocconi, Y. Eisenberg and K. Greisen, Revs. Modern Phys. 24, 133 (1952) and J. Pine, R. J. Davisson and K. Greisen, Nuovo Cim. 14, 1181 (1959).
7. The interactions of  $\mu$ -mesons with matter, G. N. Fowler and A. W. Wolfendale, Prog. in Elementary Particle and Cosmic Ray Physics, Vol. IV, North-Holland Publishing Co., Amsterdam, 1958.