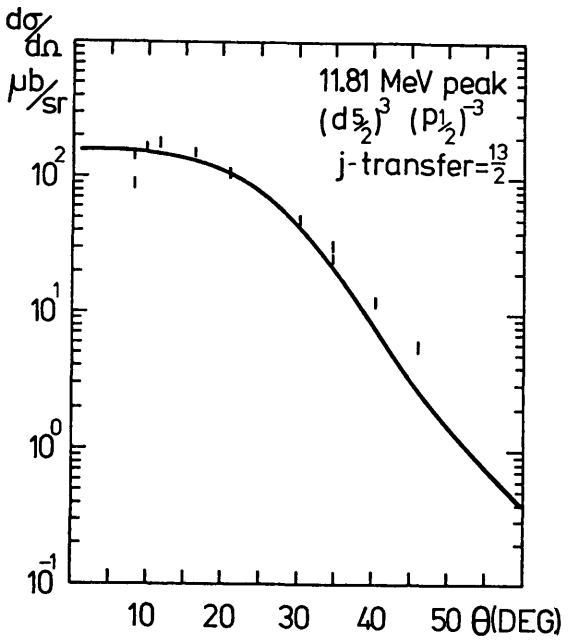

Figure 3. The differential cross section for the protons in the peak labeled 11.81 MeV in Fig. 1. The line shows the result of the DWBA calculation.

1) DWUCK4, P.D. Kunz (unpublished); Extended Version of J.R. Comfort (unpublished).

2) H.T. Fortune, Phys. Rev. C 17, 861 (1978).

STUDIES OF ^{84}Kr(^{6}Li,d)^{88}Sr, E(^{6}Li) = 100 MeV

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A special gas cell has been constructed and used to study the α-transfer reaction ^{84}Kr(^{6}Li,d)^{88}Sr in the QDDM magnetic spectrometer. It was hoped that this reaction would preferentially populate coupled $J^{\pi}=0^{+}$ 2p-2n pairing-vibrational states ("α-vibrations") in the doubly-magic nucleus ^{88}Sr. Several spectra up to E_x = 8 MeV in ^{88}Sr have been obtained with no obvious indication of an enhanced $J^{\pi}=0^{+}$ transition.

Low cross sections (<1μb/sr) and interference from gas contaminations, presumably from outgassing of the cell and its windows, limit the quality of the data. However, the negative results appear consistent with ^{92}Zr(d,^{6}Li)^{88}Sr data observed at E_d=33 MeV (UM/BNL) and E_d=55 MeV (KVI; to be published).