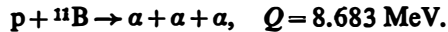


reaction was studied in detail at higher energies³⁾ and further study was recommended. A number of specific experimental problems had to be solved, including the preparation of Li targets. Our preliminary data indicate a strong sequential decay through ^5He and ^8Be states.

There is a large number of experimental studies and theoretical discussions (see ref.⁴⁾) on the reaction



Most of the experiments suggest that it proceeds through ^8Be intermediate states.

A typical two-parameter spectrum for $\theta_1 = 90^\circ$ and $\theta_2 = 85^\circ$ obtained in our measurement is shown in Fig. 2. The spectrum is dominated by peaks corresponding to the sequential decay through ^8Be states. A detailed study should be made of the measured spectra to obtain information on the mechanisms involved. Several previous analyses⁴⁾ have suggested the influence of ^{12}C resonances on spectrum shape. However, several other mechanisms need to be included. Work on clarifying the three-body break-up reactions on light nuclei starting from the cluster structure of light nuclei and graph summation method⁵⁾ is in progress.

References

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