

## Direct measurement of the $^{26}\text{Si}(\alpha, p)^{29}\text{P}$ reaction at CRIB for the nucleosynthesis in the X-ray bursts

In the X-ray bursts, the  $^{26}\text{Si}(\alpha, p)^{29}\text{P}$  reaction rate has a great impact on the light curve. However, there was not enough experimental data for this reaction because of the technical difficulty.

A direct measurement was performed at the CNS RI beam separator (CRIB). And the yield of the  $(\alpha, p)$  reaction was determined by removing the background events seen in the measurements. Due to the large number of background events and the large statistical error, an upper bound for the reaction cross section was obtained, which was 0.134 times the NON-SMOKER statistical model.

The analysis method and the results will be discussed.

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