8. SPACE DISTRIBUTIONS AND DECAY PROBABILITY FOR EXCITED STATE OF ^{7}Li*(7,45 MeV) IN REACTION ^{7}Li(α, α^{6}Li)n

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Differential cross-sections of excitation and decay of ^{7}Li*(7,45 MeV) resonance into ^{6}Li + n channel in three particle reaction ^{7}Li(α, α^{6}Li)n at α-particle energy of 27,2 MeV have been determined in kinematically complete and incomplete experiments. Usage of position sensitive detector made it possible to obtain the data on space distributions of decay events for full range of possible angles and to determine the total probability of this process, which value essentially differs from the data for binary reactions. This result is agreed with previously obtained [1] and confirms the theoretical calculations [2] of decay branching ratio for short lived near-threshold resonances in three particle reactions.