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## Search for $^{10}\text{He}$ in the stopped pion absorption $^{14}\text{C}(\pi^-, p^3\text{He})\text{X}$

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The formation of the  $^{10}\text{He}$  states was studied in the reaction of stopped pion absorption  $^{14}\text{C}(\pi^-, p^3\text{He})\text{X}$ . Measurements were carried out using two-arm multilayer semiconductor spectrometer and “radioactive” target consisting of 76%  $^{14}\text{C}$  and 23%  $^{12}\text{C}$ . The contribution of uncontrolled impurities in the target was  $\leq 1\%$ . In order to determine the contribution of the  $^{12}\text{C}$  impurity measurements were performed on an isotope pure carbon  $^{12}\text{C}$  target. An indication on the excitation state with  $E_x \sim 6$  MeV was observed in missing mass spectrum of  $^{14}\text{C}(\pi^-, p^3\text{He})\text{X}$  reaction. Comparison with theoretical and experimental results obtained by other authors was performed.

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