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Proportionality between (t,3He) reaction differential cross sections and Gamow-Teller strengths.[1] GEORGE PERDIKAKIS, Michigan State University, (T,3HE) COLLABORATION AT NSCL, MICHIGAN STATE UNIVERSITY COLLABORATION — The so-called unit cross section describing the proportionality between differential cross sections and Gamow-Teller transition strengths is studied for the case of the (t,^{3}He) charge-exchange reaction. Experimental data for H, and ^{12,13}C targets taken at 115 AMeV are complimented by existing data for ^{2}H, ^{6}Li, and ^{26}Mg. The (t,^{3}He) results are compared with results for the (^{3}He,t) reaction at 140 AMeV and for targets with 12¡A¡120. Fairly consistent results for the unit cross section are found in the overlapping mass region. The (t,^{3}He) and (^{3}He,t) data sets are combined and used for a systematic study of the parameters that describe the unit cross section in the eikonal approximation.

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