

DETERMINATION OF THE EFFECTIVE
PARAMETERS OF PROTON- ^3He SCATTERING
ON THE BASIS OF THE NEUTRON-TRITON
SCATTERING DATA

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S u m m a r y

We have studied the relations between the neutron-triton scattering lengths and effective ranges and the corresponding quantities for the p- ^3He scattering in the framework of the potential model with an effective nucleon-nucleus interaction in the form of a δ -shell potential. It is shown that the Coulomb renormalization of the pure nuclear scattering lengths does not change the relation well established for the n + ^3H system between the lengths: $A^1 < A^0$. We have predicted the p- ^3He scattering lengths which give preference to set I of the phase analysis performed by E.A. George et al. (2003), which corresponds to the inequality $A_{nc}^1 < A_{nc}^0$ for the scattering lengths.