An Attempt to Determine the ⁸Li Valence Neutron ANC via ⁷Li (⁸Li, ⁷Li) ⁸Li

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Motivated by the desire to test isospin mirror symmetry and determine the astrophysical S factor for the ${}^{7}\text{Be}(p,\gamma){}^{8}\text{B}$ reaction indirectly, we have carried out a measurement of the elastic transfer reaction ${}^{7}\text{Li} \left({}^{8}\text{Li}, {}^{7}\text{Li}\right){}^{8}\text{Li}$ at the ISAC facility of TRIUMF at two beam energies using highly segmented silicon detectors. Theoretical calculations, the experiment and preliminary results of the data analysis will be presented.