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**(6Li,d) reactions at sub-Coulomb energies for nuclear astrophysics** GRIOGRY ROGACHEV, Texas A&M University, MELINA AVILA, Argonne National Laboratory, EVGENIY KOSHCHIY, Texas A&M University, LAGY BABY, JOSEPH BELARGE, KIRBY KEMPER, Florida State University, ANTHONY KUCHERA, Michigan State University, DANIEL SANTIAGO-GONZALEZ, Louisiana State University, AKRAM MUKHAMEDZHANOV, Texas A&M University — Near $\alpha$-threshold states play an important role in nuclear astrophysics as they often determine the ($\alpha$,$\gamma$), ($\alpha$,p) and ($\alpha$,n) reaction rates. Clustering can enhance the corresponding cross sections and it is necessary to measure the partial $\alpha$-width to evaluation the low energy cross section. We will discuss application of sub-Coulomb ($^6$Li,d) and ($^7$Li,t) $\alpha$-transfer reactions to extract an asymptotic normalization coefficients (ANCs) for the astrophysically important resonances and present new data on $^{12,13}$C,$^{16}$O($^6$Li,d) reactions.

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