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Measurements of Lifetimes of States in ^{19}Ne and the ^{15}O$(\alpha,\gamma)^{19}$Ne Reaction Rate[1] BARRY DAVIDS, TRIUMF, MYTHILI SUBRAMANIAN, TRIUMF and University of British Columbia — We have measured the lifetimes of several states in ^{19}Ne above the α emission threshold important in the $^{15}\mathrm{O}(\alpha,\gamma)^{19}\mathrm{Ne}$ reaction. Combining these and other lifetime measurements with measurements of the α decay branching ratios of these states, we evaluate the rate of the $^{15}\mathrm{O}(\alpha,\gamma)^{19}\mathrm{Ne}$ reaction and discuss its role in Type-I X-ray bursts.

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