

Abstract Submitted
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Lifetimes of states in ^{19}Ne above the $^{15}\text{O} + \alpha$ threshold MYTHILI SUBRAMANIAN, BARRY DAVIDS, TRIUMF, TOM ALEXANDER, Deep River, GORDON BALL, TRIUMF, M. CHICOINE, University of Montreal, RAVURI CHAKRAWARTHY, RANDY CHURCHMAN, TRIUMF, JIM FORSTER, S. GUJRATHI, University of Montreal, GREG HACKMAN, DEREK HOWELL, TRIUMF, RITU KANUNGO, St. Mary's University, J. LESLIE, Queen's University, ELIZABETH PADILLA, Mexico University, CHRIS PEARSON, CHRIS RUIZ, GOTZ RUPRECHT, TRIUMF, MIKE SCHUMAKER, University of Guelph, ISAO TANIHATA, RCNP, Japan, CHRIS VOCKENHUBER, PAT WALDEN, STAN YEN, TRIUMF — The $^{15}\text{O}(\alpha,\gamma)^{19}\text{Ne}$ reaction plays a role in the ignition of Type I x-ray bursts on accreting neutron stars. The lifetimes of states in ^{19}Ne above the $^{15}\text{O} + \alpha$ threshold of 3.53 MeV are important inputs to calculations of the astrophysical reaction rate. These levels in ^{19}Ne were populated in the $^3\text{He}(^{20}\text{Ne},\alpha)^{19}\text{Ne}$ reaction at a ^{20}Ne beam energy of 34 MeV. The lifetimes of six states above the threshold were measured with the Doppler shift attenuation method (DSAM). The measurement, methods of analysis and implications of the results will be discussed.

Mythili Subramanian
TRIUMF/ University of British Columbia

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