

^{68}Se RP-PROCESS WAITING POINT

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In order to interpret qualitatively X-ray burst observations it is essential to determine the effective life time of the long lived waiting points in the rp-process. In this work we address the nuclear physics uncertainty in the lifetime of the ^{68}Se rp-process waiting point that depends sensitively on the ^{68}Se proton capture Q-value. The experiment was performed at the National Superconducting Cyclotron Laboratory (NSCL) at Michigan State University (MSU) and the main goal is to identify branches of beta-delayed proton emission of ^{69}Kr , particularly from lower energy states in ^{69}Br that are of astrophysical interest, and to use these results to constrain the proton separation energy of ^{69}Br .

Nuclear
Seminar

All interested
persons are
cordially
invited to
attend.