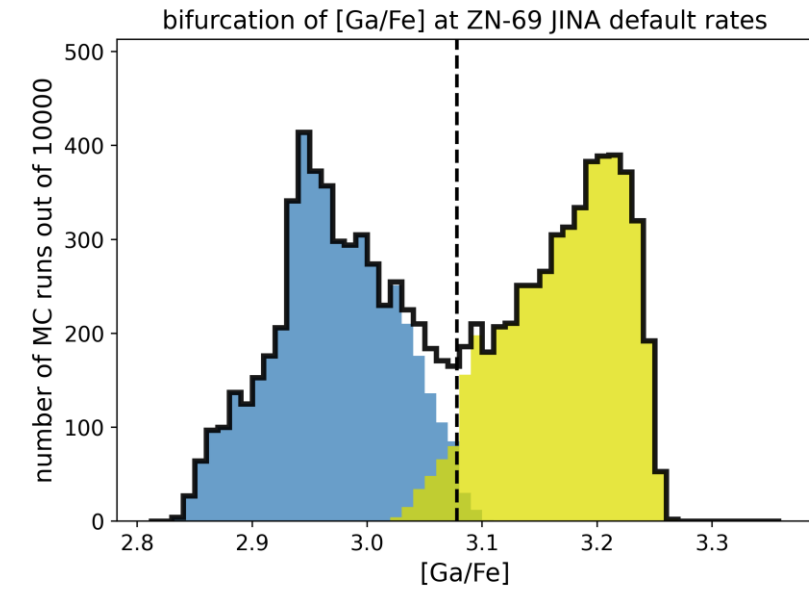


Constraining the ^{69}Zn Neutron Capture Cross-Section via the β -Oslo Method

ABSTRACT ID #52

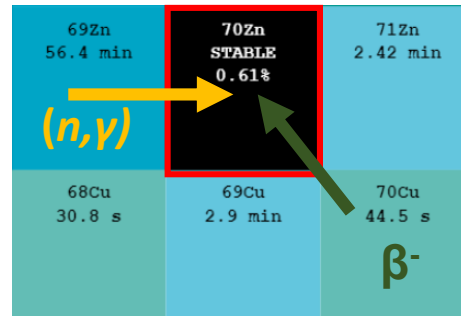
E. K. Ronning *et al.*

Bifurcation in i -process abundance of Ga using $^{69}\text{Zn}(n,\gamma)^{70}\text{Zn}$ JINA REACLIB Rate

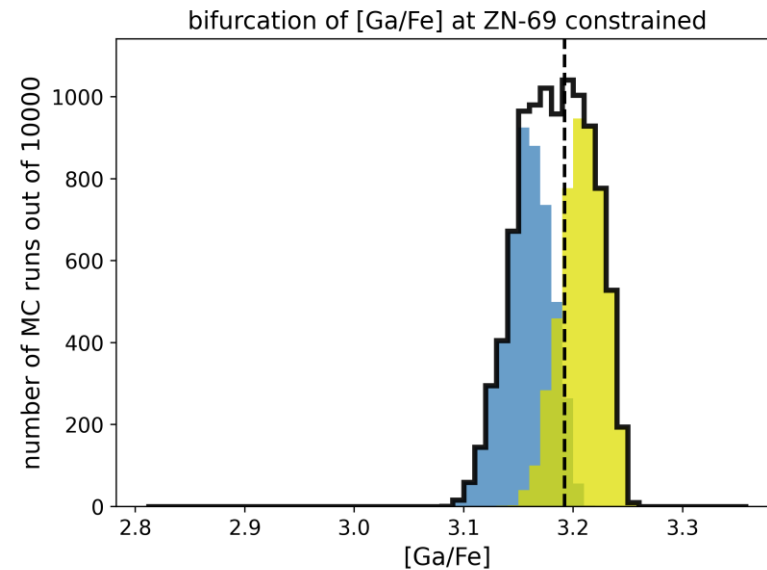


^{69}Zn is unstable
 $T_{1/2} = 56.4$ min

Difficult to directly
measure XS/RXN
rate information

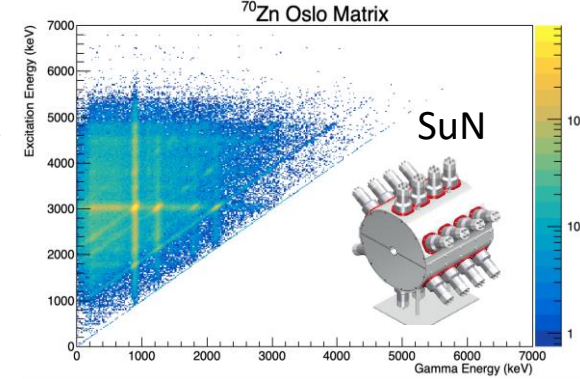


Use ^{70}Cu β -decay to indirectly
constrain $^{69}\text{Zn}(n,\gamma)^{70}\text{Zn}$



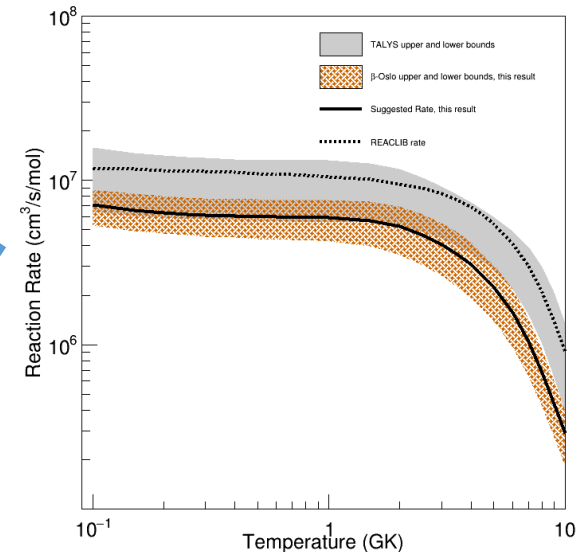
i -process Ga abundance constrained
with experimental $^{69}\text{Zn}(n,\gamma)^{70}\text{Zn}$ rate

Extract statistical nuclear properties
(NLD and γ SF) using the Oslo method



Input NLD and
 γ SF into TALYS

$^{69}\text{Zn}(n,\gamma)^{70}\text{Zn}$ Reaction Rate



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