

$^{39}\text{P}$   $\beta^-$ -n decay (0.28 s) 1988Mu08

<u>Type</u>	<u>Author</u>	<u>History Citation</u>	<u>Literature Cutoff Date</u>
Full Evaluation	Jun Chen	NDS 152, 1 (2018)	30-Sep-2017

Parent:  $^{39}\text{P}$ :  $E=0$ ;  $J^\pi=(1/2^+)$ ;  $T_{1/2}=0.28$  s 4;  $Q(\beta^-n)=6.02\times 10^3$  11;  $\% \beta^-n$  decay=26 8

$^{39}\text{P}$ - $J^\pi, T_{1/2}$ : From Adopted Levels of  $^{39}\text{S}$ .  $T_{1/2}=0.16$  s +30-10 from 1988Mu08.

$^{39}\text{P}$ - $Q(\beta^-n)$ : From 2017Wa10.

1988Mu08: Radioactive  $^{39}\text{P}$  isotopes were produced via fragmentation of 45 MeV/nucleon  $^{86}\text{Kr}$  beam from the GANIL cyclotron on a  $^{181}\text{Ta}$  target. Fragments were separated and identified by the magnetic spectrometer LISE and implanted into a semiconductor detector telescope. Neutrons were detected by a  $4\pi$  liquid scintillator. Measured  $\beta n$ -coin, decay time distribution. Deduced  $\beta$ -delayed neutron emission probability of  $^{39}\text{P}$ , parent  $T_{1/2}$ .

$\% \beta^-n=26$  8 from Adopted Levels of  $^{39}\text{P}$ . Value from 1988Mu08 is 41 +32-16.

 $^{38}\text{S}$  Levels

<u>E(level)</u>	<u><math>J^\pi</math></u>
0	$0^+$