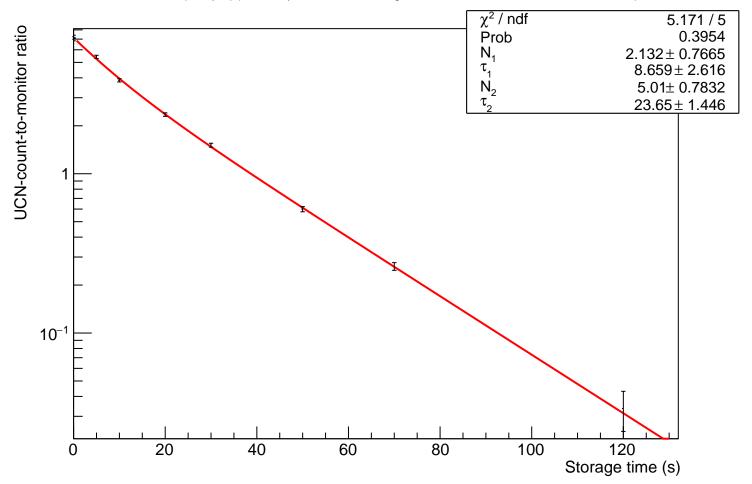


TCN18-087 (MV open) (double exponential fit, with background subtracted, normalized to monitor detector)



TCN18-087 (MV open) (single exponential fit + background, unnormalized) χ^2 / ndf 88.71 / 6 Prob 5.627e-17 p0 $1.575e+04\pm77.27$ 18.54 ± 0.1735 Background 366.9 ± 17.14

80

100

120

Storage time (s)

UCN count

10⁴

10³

20

40

60

He3 detector rate He3_989_1 He3 rate (\bar{s}^1) **Entries** 3352 10^{2} Mean 52.73 Std Dev 24.8 Integral 3351 χ^2 / ndf 78.5 / 78 Prob 0.4628 p0 2868 ± 701.1 10 15.96 ± 0.77 1

150

200

300

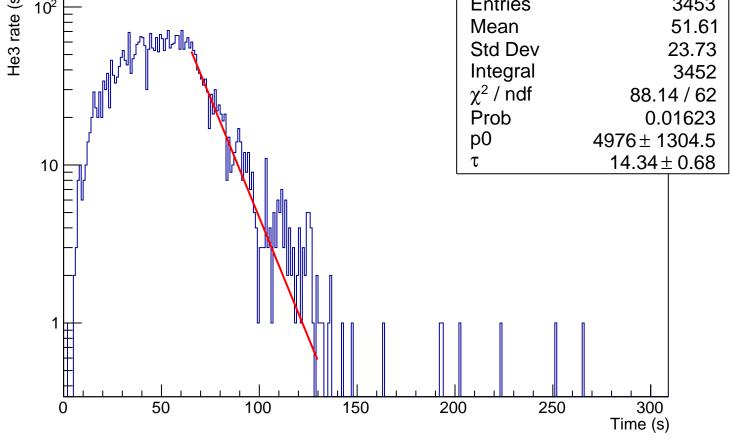
Time (s)

250

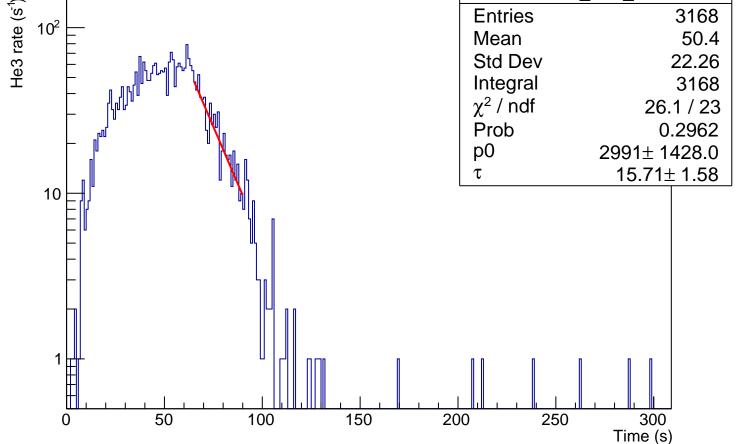
100

50

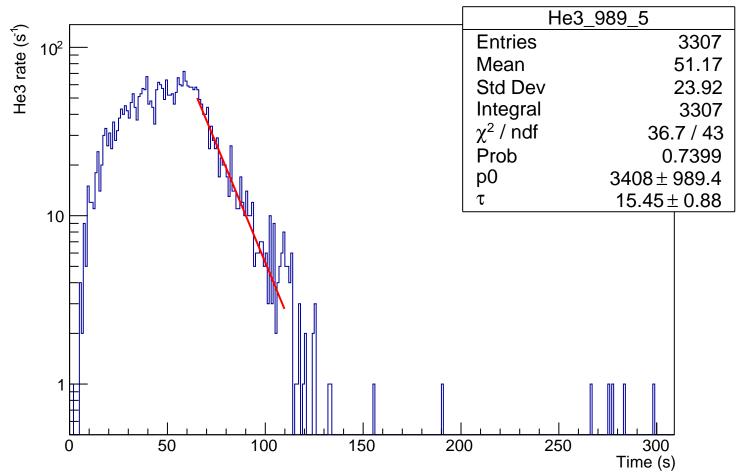
He3 detector rate He3_989_3 He3 rate (\bar{s}^1) **Entries** 10^{2} 3453 Mean 51.61 Std Dev 23.73 Integral 3452 χ^2 / ndf 88.14 / 62 Prob 0.01623 p0 4976 ± 1304.5 14.34 ± 0.68 10



He3 detector rate He3_989_4 He3 rate (s¹) **Entries** 10^{2} Mean Std Dev Integral χ^2 / ndf Prob p0 10



He3 detector rate



He3 detector rate He3_989_6 He3 rate (\bar{s}^1) **Entries** 3207 10^{2} Mean 48.84 Std Dev 21.79 Integral 3207 χ^2 / ndf 8.119 / 13 Prob 0.8357 p0 3391± 2813.4 15.28 ± 2.71 10 100 200 250 50 150 300

Time (s)

Average lifetime from He3 data:

 τ = 15.1905176277 +/- 0.0309959074007 s