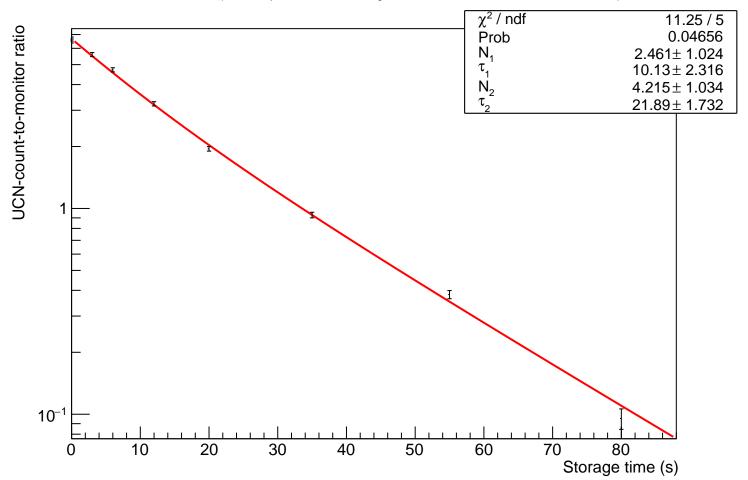


TCN18-068_50A (double exponential fit, with background subtracted, normalized to monitor detector)



TCN18-068_50A (single exponential fit + background, unnormalized) χ^2 / ndf 37.43 / 6 Prob 1.451e-06 p0 $1.497e+04\pm70.41$ 10⁴ 17.06 ± 0.1887 Background 401.6 ± 24.17 10³

UCN count

10

20

30

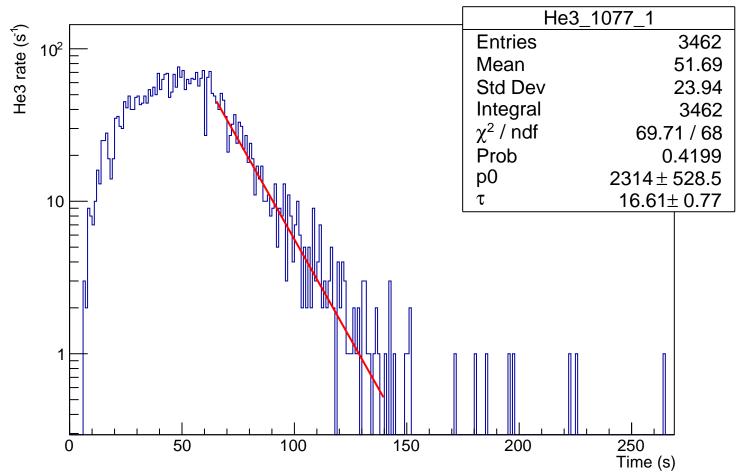
40

50

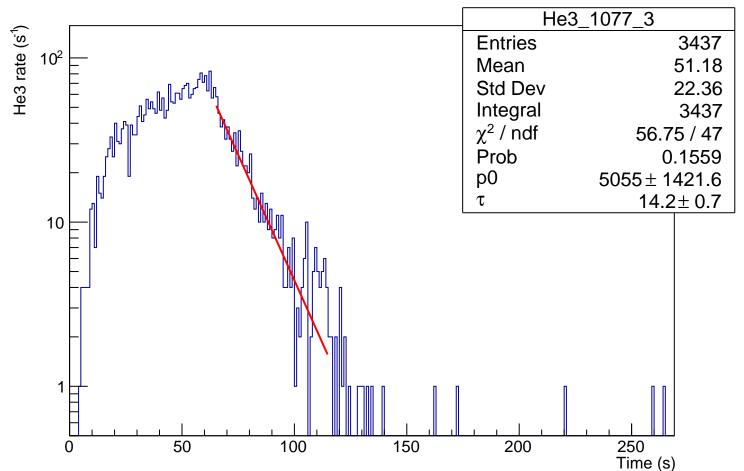
60

70

80 Storage time (s) He3 detector rate



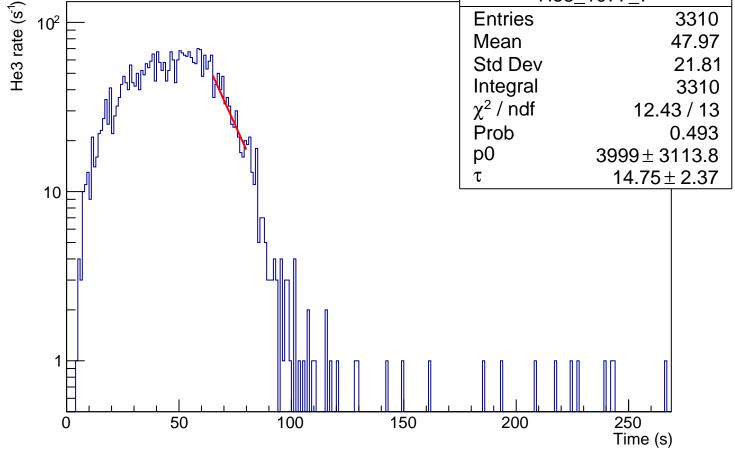
He3 detector rate



He3 detector rate He3_1077_5 He3 rate (s¹) **Entries** 3340 10^{2} Mean 49.57 Std Dev 20.5 Integral 3340 χ^2 / ndf 38.38 / 28 Prob 0.09135 p0 2398 ± 998.6 16.35 ± 1.46 10 100 50 150 200 250

Time (s)

He3 detector rate He3_1077_7 He3 rate (\bar{s}^1) **Entries** 3310 10^{2} Mean 47.97 Std Dev 21.81 Integral 3310 χ^2 / ndf 12.43 / 13 Prob 0.493 p0 3999 ± 3113.8 14.75 ± 2.37 10



Average lifetime from He3 data:

 τ = 15.416809016 +/- 0.0560350420721 s