Analysis Note for 60H Dataset Relative Unblinding

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High Level Summary

- Lead Analyst: Nick Kinnaird
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- Positron Reconstruction Method: Recon West
- Software Release: V9_11_00
- Dataset: gm2pro_daq_full_run1_60h_5033A_withfullDQC
- Histogramming Method: Weighted ratio
- Gain Correction Method: Default in reconstruction
- Pileup Correction Method: Asymmetic shadow window
- Lost Muon Spectrum Extraction: N/A
- Models for CBO and VW: Exponential envelopes, frequency from tracking analysis
- $R = -19.something \pm 1.somethingppm$ (blinding with common string)
- $\chi^2/NDF = 4211/4200$something

Final fit function:

$$R(t) = \frac{2f(t) - f_+(t) - f_-(t)}{2f(t) + f_+(t) + f_-(t)}$$

$$f_\pm(t) = f(t \pm T_a/2)$$

$$f(t) = C(t)(1 + A\cos(\omega_a t + \phi))$$

$$C(t) = 1 + A_{cbo}e^{-t/\tau_{cbo}}\cos(\omega_{cbo}t + \phi_{cbo})$$