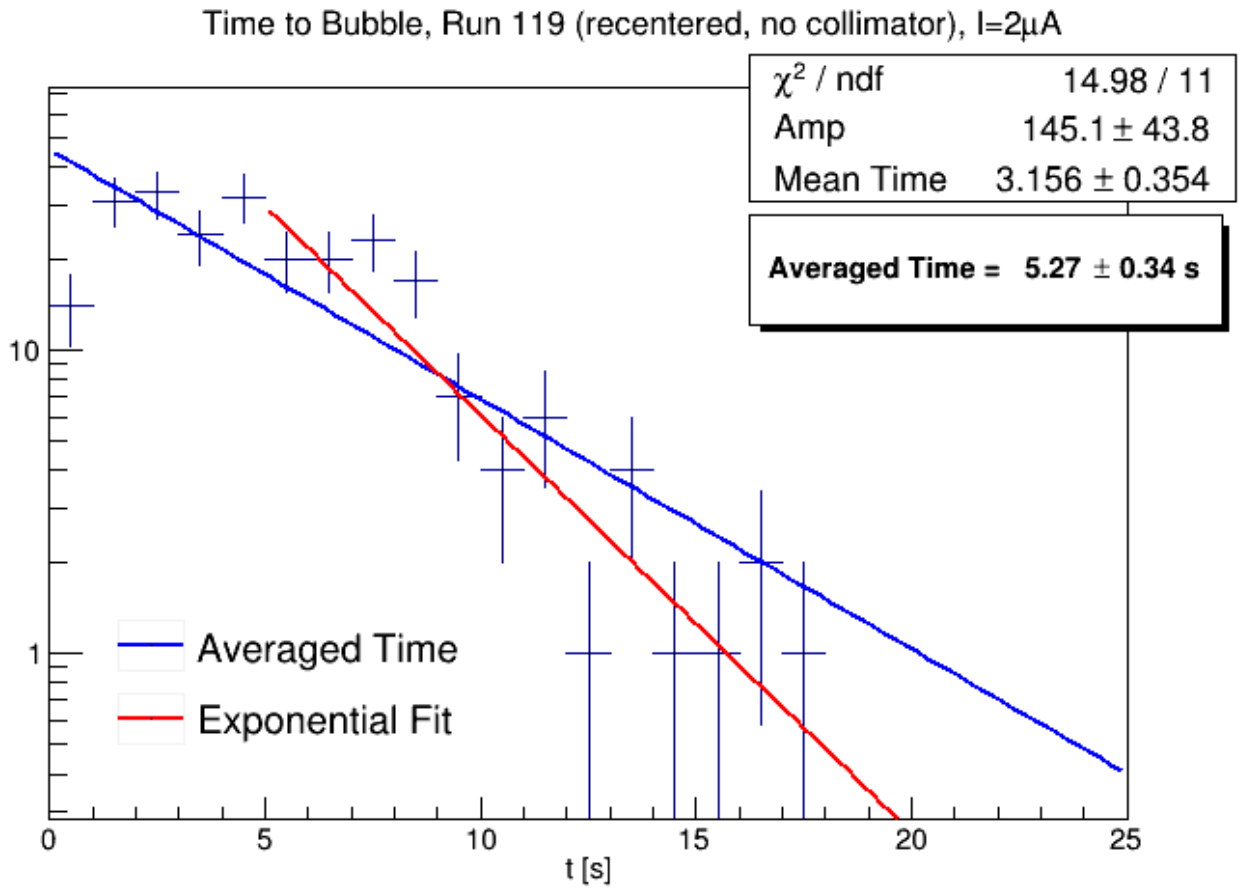
Early Time Inefficiencies

- Early time inefficiencies affect averages
- Size of effect seemed to vary over run but not explored in detail
- Perhaps has common shape to fit?
- Need to develop statistical test



Outstanding Analysis Issues

- Need to incorporate time-level BCM normalization
- Simulation of geometric photon acceptance from BPM info
- Early time inefficiency rejection
- Time spectra from fiducial, background, and wall regions
- Study neutron induced backgrounds in G4
  - Deuterium in hydraulic fluid (n from photodisintegration)
  - Differences from boreated poly, cosmogenic neutron, AmBe source
  - External such as $\gamma^{17}O$
  - We need to become familiar with G4 neutron cross sections
- Quantitative threshold analysis?
- Cross sections from steps (modified Penfold-Leiss, Bayesian, etc)

Outstanding Hardware Issues

- New binocular optics implementation
  - Limits? Ray tracing?
- New computer (Claudio working with Kevin)
- Installation of xray viewer permanently
- Hydraulic fluid deuterium solution (boreated?)
- New cell without borosilicate
- New cameras? (Higher resolution?)
- New lighting (higher intensity?), fast LED swapout
- Shutter delayed from superheat