# PHYS 359 – feedback and evaluation of lab reports

Recall the aims of this laboratory:

1. To learn how to perform measurements

2. To evaluate the uncertainties of the measured quantities

3. To present results in a formally structured report.

With this in mind, please expect a lot of feedback, especially on interim reports. The amount

of feedback below is actually typical for an early draft from even a seasoned professor.

**Importantly, your first job is to address the issues listed below on future reports. Issues marked with more stars (\*) are more critical than those with fewer (or no) stars; if critical issues are not addressed in subsequent reports, we will deduct as many as 5 points per star from the overall report grade.**

If anything is unclear, please ask us. Our goal is give you any and all information we possibly can

to produce the best possible reports. Writing is not easy, it requires learning by failing, and as such, it requires one to continuously swallow pride. Again, please do not be shy about asking anything. We are here to help.

# Project 1, Report 1: **90/100**

We assume everyone comes from a different background, so the minimum for any category is 75/100 this round. “90” is basically “on track”. In all cases, the \*’d issues (and those in Dominic’s feedback) need to be addressed for the next report. Time to pick up the pace.

**20% Writing: logical flow, justified, figures well-made and described: 80/100**

Missing intro – it then becomes hard to follow the experimental section.

Lots of analysis was done that doesn’t seem to be reported (e.g. fit for angle).

**20% Apparatus & measurements understood, explained & sensible: 80/100**

The origin of the Gaussian is not understood. Check out what happens in the scintillator.

**20% Justified quantitative statistical uncertainties, chi^2 & residuals discussed quantitatively: 100/100**

Very good.

**20% Justified quantitative systematic uncertainties:** 100/100

Excellent!

**20% Validity of work and sufficient work completed: 90/100**

It would have been good to see a (rough) plot of the scattering cross section fit to the Thomson to KN model.

**Bonus** Surprise awesomeness (beyond-basic measurements, beautiful figures, clean writing, etc.):

**Feedback on plan:**

I suggest you move ‘fast’ to your 3rd goal. Keep the momentum going.

**Some further minor comments:**