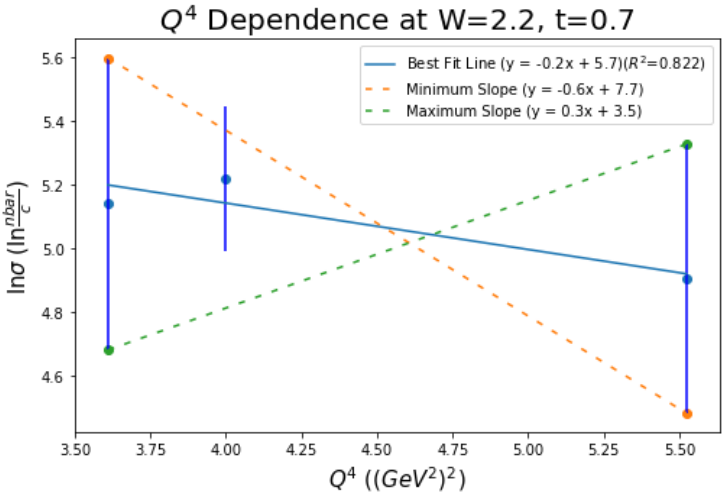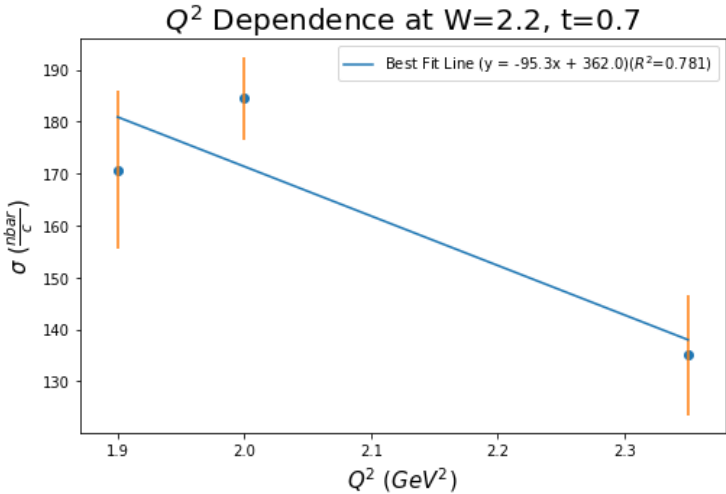# Project Update

8/10/20

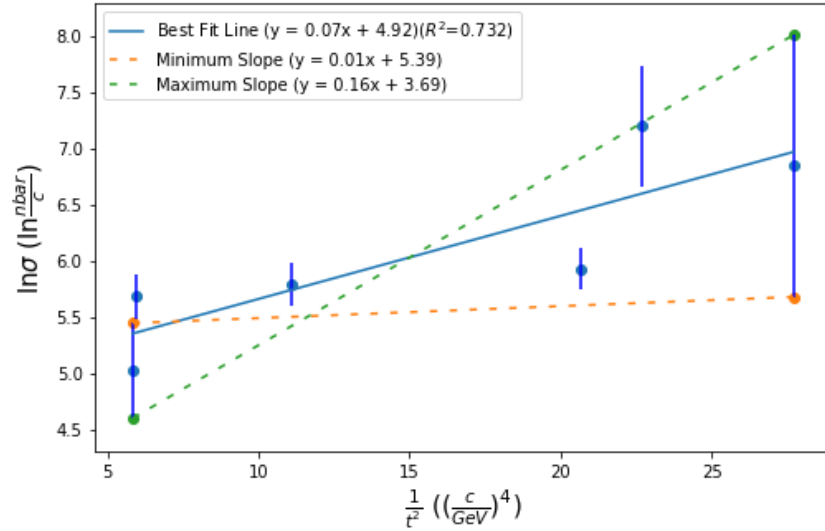Leslie Kim

Progress

- Last week:
  - Practiced with ROOT files
  - Finished up data fittings
  - Wrote graph summaries
- This week
  - Finish graph summaries/update GitHub
  - Prepare final presentation

Kaon Data

Q^2 Dependence at W=2.2, t=0.7

Best Fit Line (y = -95.3x + 362.0)(R^2=0.781)

Q^4 Dependence at W=2.2, t=0.7

Best Fit Line (y = -0.2x + 5.7)(R^2=0.822)
Minimum Slope (y = -0.6x + 7.7)
Maximum Slope (y = 0.3x + 3.5)

$\frac{1}{Q^6}$ Dependence at W=2.2, t=0.7

Best Fit Line (y = 607.4x + 93.0)(R^2=0.706)
Minimum Slope (y = 128.0x + 136.8)
Maximum Slope (y = 907.8x + 53.6)
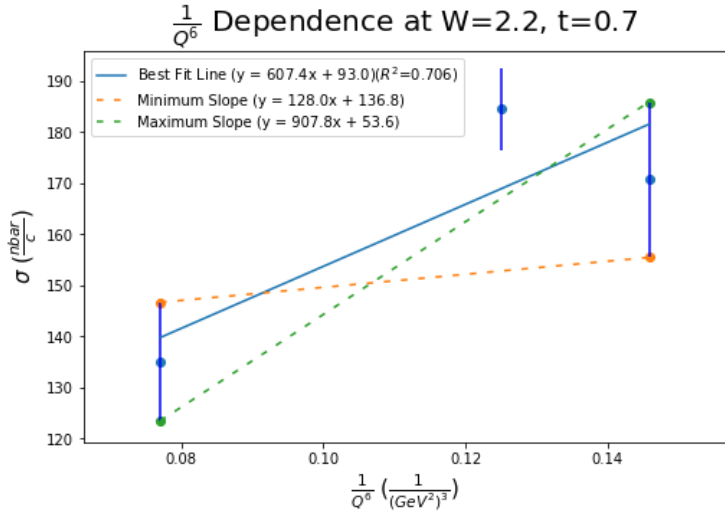
Kaon Data

$\frac{1}{t^2}$ Dependence at Q^2=1.6, W=2.2, t=0.2, x=0.1-0.2

- Best Fit Line (y = 0.07x + 4.92)(R^2=0.732)
- Minimum Slope (y = 0.01x + 5.39)
- Maximum Slope (y = 0.16x + 3.69)

$\frac{1}{t^2}$ Dependence Scenario1 (Excluding (0.19,940))

- Best Fit Line (y = 0.08x + 4.85)(R^2=0.670)
- Minimum Slope (y = 0.07x + 5.03)
- Maxmimum Slope (y = 0.19x + 3.51)
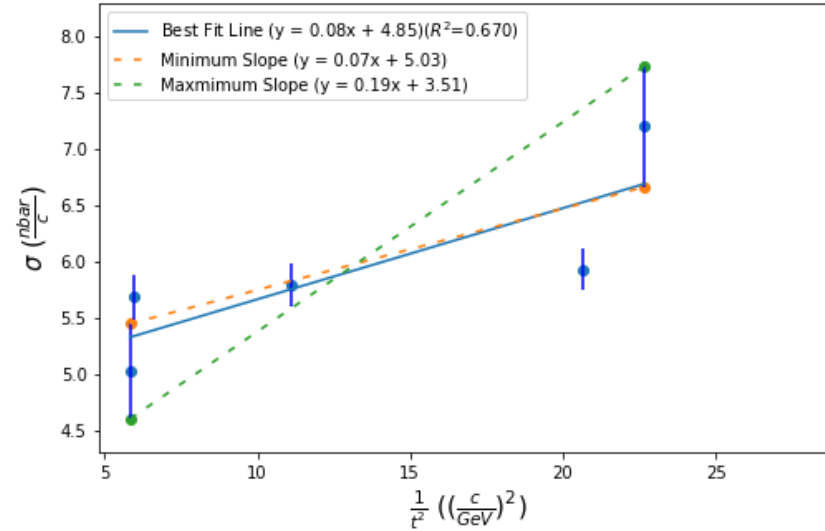
$\frac{1}{t^2}$ Dependence Scenario2 (Excluding (0.414,152.1))

- Best Fit Line (y = 0.06x + 5.21)(R^2=0.637)
- Minimum Slope (y = -0.01x + 4.94)
- Maxmimum Slope (y = 0.12x + 4.79)
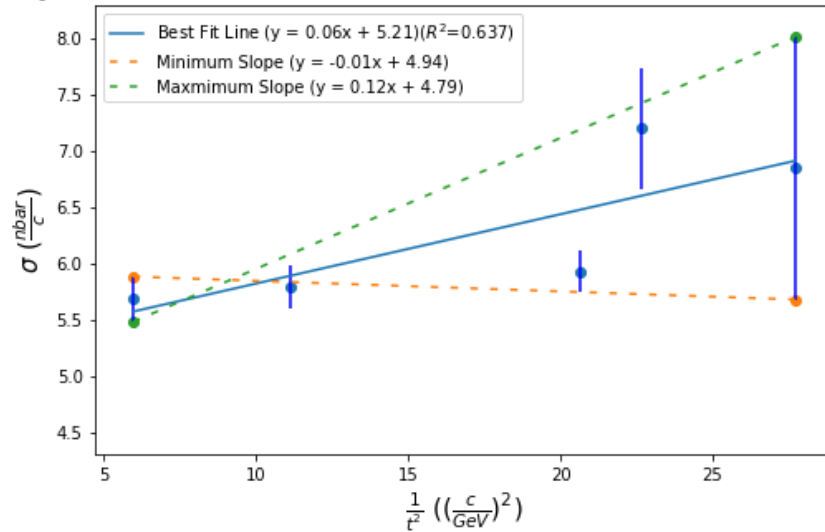
$\frac{1}{t^2}$ Dependence Scenario3 (Excluding (0.41,293.9))

- Best Fit Line (y = 0.06x + 5.00)(R^2=0.790)
- Minimum Slope (y = 0.01x + 5.39)
- Maxmimum Slope (y = 0.16x + 3.69)