Homework5: Due 10/22 L15Example2: Measurement of absolute zero (textbook, ch 8, sec. 8.5, page 190)

Data

| P [mm Hg] | 65 | 75 | 85 | 95 | 105 |
|--------------|-----|----|----|----|-----|
| T[°C] | -20 | 17 | 42 | 94 | 127 |
| σ | 1 | 1 | 1 | 1 | 1 |

Functional form

$$T = A + BP$$
Find:

- - A and B (fit parameters and uncertainties)
 - \triangleright S_m , ndf , S_m / ndf and p-value.
 - Give interpretation of a p-value
- Compare the known value for the absolute zero temperature (-273.15 °C) with the fitted parameter. How good is the agreement (or disagreement) Quantify your answer by giving the corresponding p-value and its interpretation.