Reading FEM

You will need:
- TIA .ser data file
- An associated .bin file with known pixel dimensions
- Know
  - Thickness start values
  - Thickness end values
  - Strip width
  - Slope
  - Offset
  - Allow

To analyze the data ensure the files annularAverage, annularIntegral, Calc_STEM_Var_512, findCenter, importBin, imortSER, and readFEM have been added to MATLAB.

Run readFEM in the format:
[annular_avg_cell, var_dp_cell] = readFEM(binX, binY, strip_width, thickness_start, thickness_end, slope, offset, allow)

You will be asked to identify the location of both the .bin and .ser file associated with your data.

After data has been imported an image will pop up, and you will be asked to define a circle covering the [NAME?]. Click once in the center of the circle, then click a second time to define the radius of the circle extending from that point. Your defined circle will be drawn. If it is accurate, type 'y' into the command window, otherwise type 'n' and you will be asked to redefine it.

You will then be asked to define the area of the beam stop. As with the previous, an image will be displayed to identify the area. Select to diagonal corners to define the rectangle. Confirm the correct area is covered and continue.

Debug data will be displayed, and both annular_average and var_DP data will be added to the workspace under the cells annular_avg_cell and var_dp_cell.