**ECE 656 Matlab Homework**

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Due before class on 9/1/15

Write a MATLAB script to plot Fermi-Dirac integrals,  of different orders, *j*, vs. the reduced Fermi energy, . Your plot should include the following orders:











Also plot  vs. .

You will have to make some decisions, such as what range of  to consider and whether to use a linear or logarithmic axis.

Your script should be clear and easy to understand. It should contact a header that explains the purpose of the script and who wrote it and when. It should be well-documented. The size of the labels should be chosen so that the plot could be pasted in a PowerPoint presentation and be readable by an audience.

You will receive credit for this assignment if your script works properly. The best script (and there may be several people tied for best) will receive additional credit.

A good way to start on this assignment is to read:

Raseong Kim and Mark Lundstrom (2008), "Notes on Fermi-Dirac Integrals (3rd Edition)," https://nanohub.org/resources/5475.