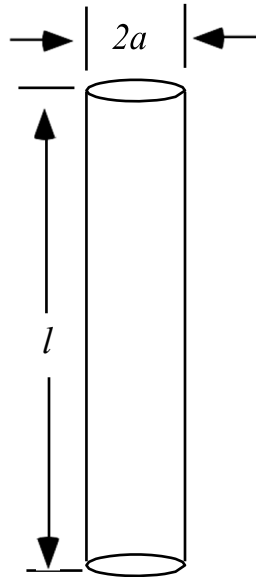# ECE 546   HOMEWORK No 2 - SOLUTIONS

1. Write a program to calculate the charge distribution on a straight thin wire of length l and radius a ($<< l$), held at a potential 1V as shown above using the method of moments. Show a plot of the charge distribution for the case where $l = 1$m and $a = 1$ mm.

Refer to: *Elements of Engineering Electromagnetics*, N. N. Rao, Prentice Hall,

   a. Second Edition, 1987, pp. 229-233

   b. Fourth Edition, 1994, pp. 247-251

   c. Sixth Edition, 2004, pp. 739-742

Solution