# CT3: Bars and planes

1. Adjust your code from CT2 to find and plot the electric field everywhere from a bar of length L and total charge Q. You might need to make several plots (end view, side view).
2. Show that the field is appropriate in the limits of infinite length and constant non-zero charge density.
3. Adjust your code to allow for a charge density which depends on location.
4. Adjust your code to find the electric field from a disc of arbitrary charge density.
5. Test your code to find and plot the electric field from a disc of radius $a$ and charge density $\sigma = \alpha e^{-\beta r}$.

Upload your code to Canvas.