

# Elen3000 Chapter 3 figs

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Note that the source code for the figs can be seen by clicking the pic. You will need to use your Browser's BACK button to return to this page.

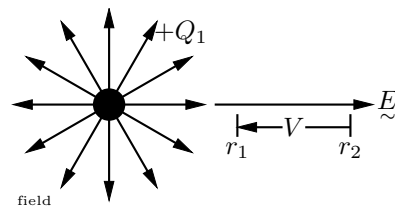


Figure 1: A +ve charge

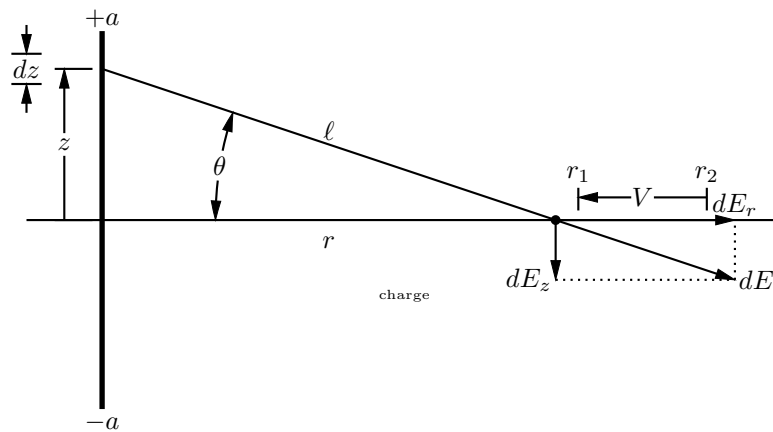


Figure 2: E field from a line of charge

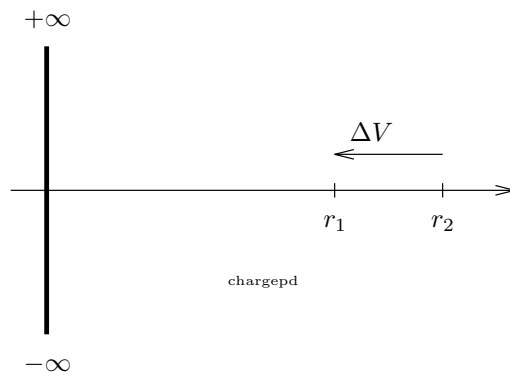


Figure 3: V developed from a line of charge

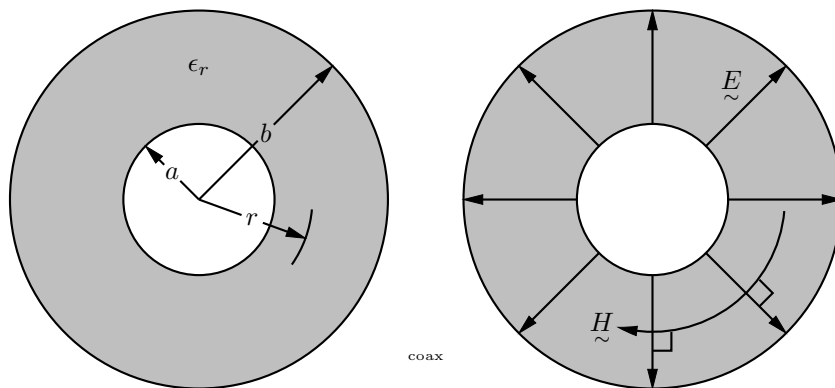


Figure 4: E&H fields in a co-axial line

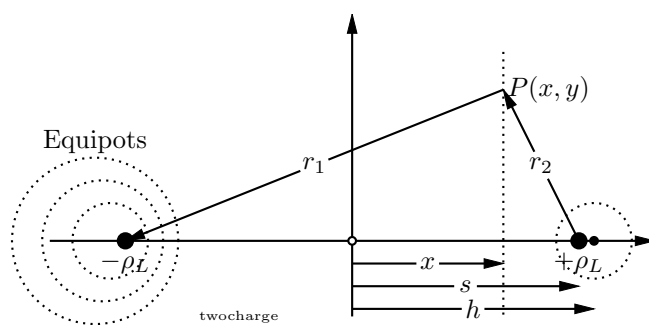


Figure 5: E field from 2 parallel lines of charge

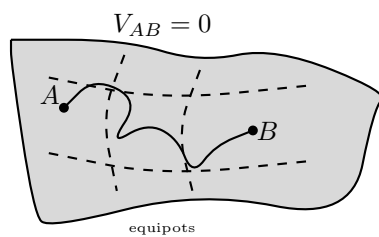


Figure 6: An Equipotential surface

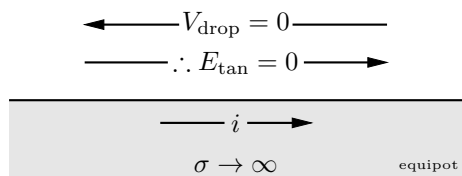


Figure 7: An equipotential

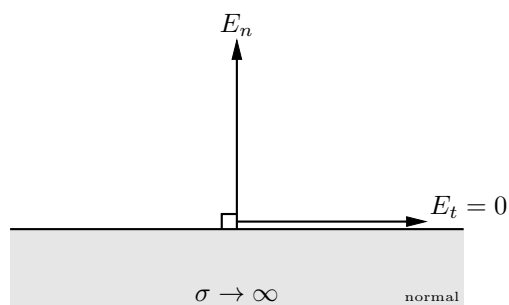


Figure 8: E field near a highly conductive surface

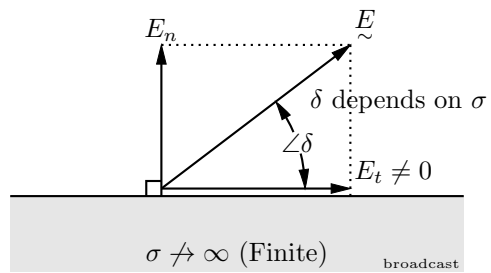


Figure 9: E field near a finitely conductive surface

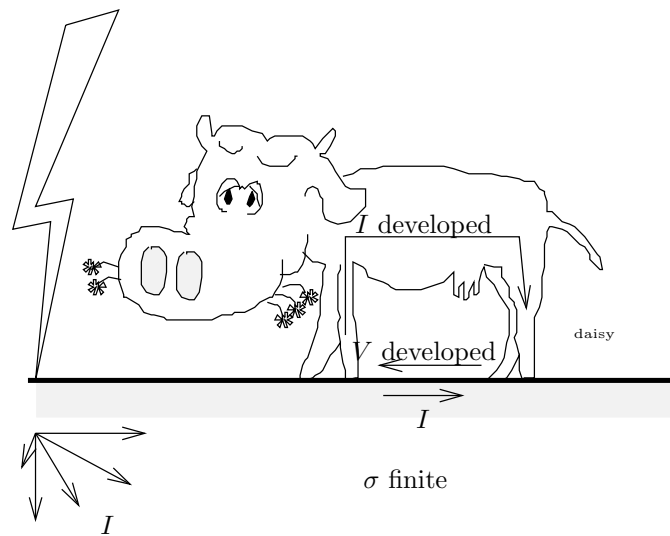


Figure 10: Potential developed as a result of Ground Currents



Figure 11: The Beverage long-wire antenna

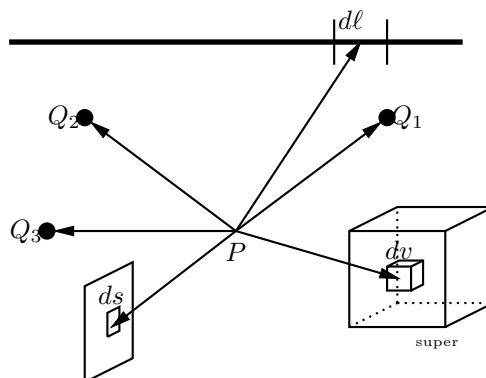


Figure 12: The superposition of potential

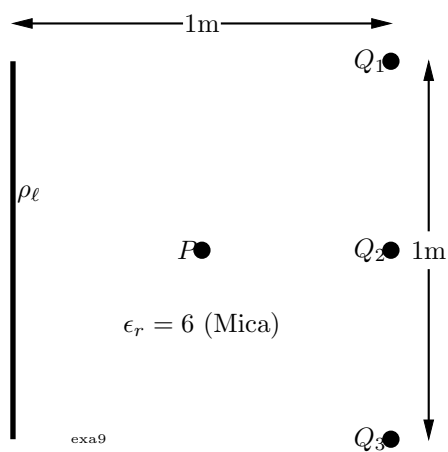


Figure 13: Example of superposition

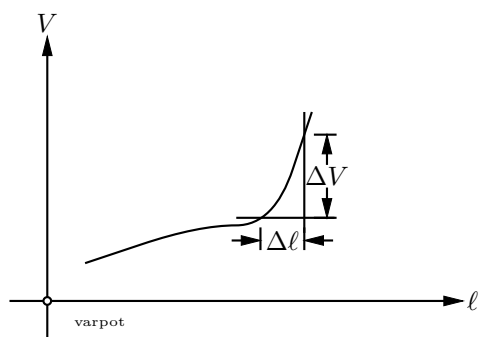


Figure 14: The *variation* of potential.

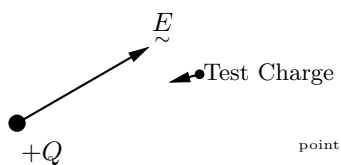


Figure 15: Rate of change of  $V$  of a point charge

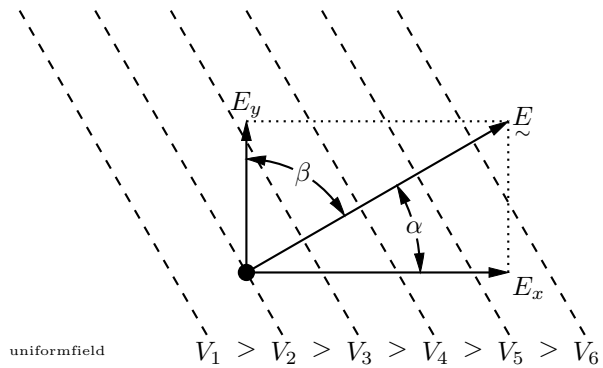


Figure 16: A Uniform E-field

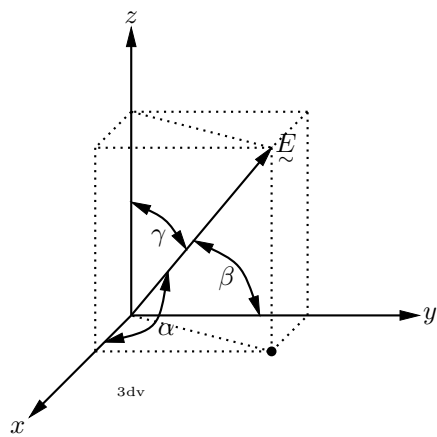


Figure 17: Grad in 3 Dimensions in a rectangular coord system

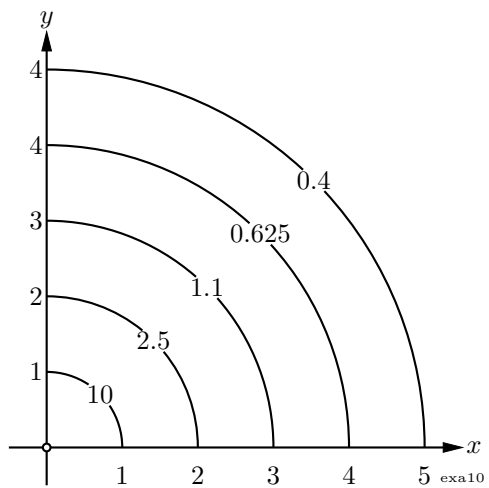


Figure 18: Circular non-uniform field

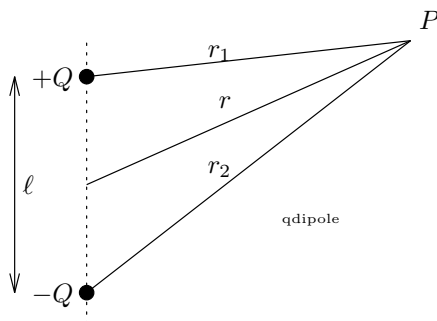


Figure 19: A Charge Dipole

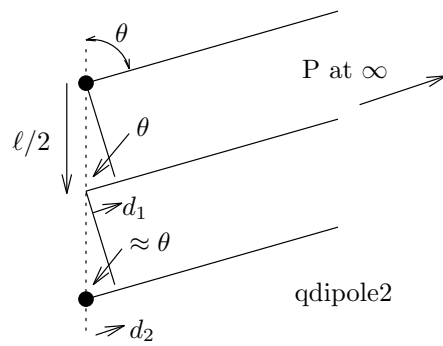


Figure 20: Charge Dipole with evaluation point far away

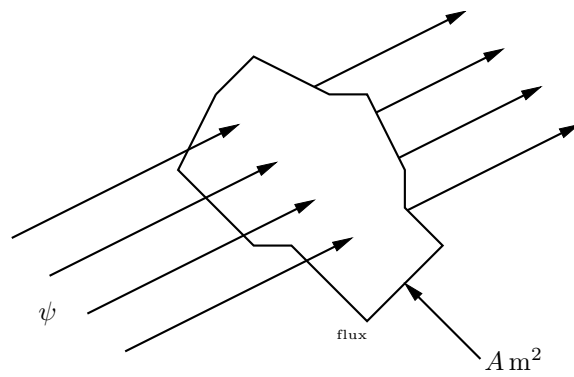


Figure 21: Flux and flux density

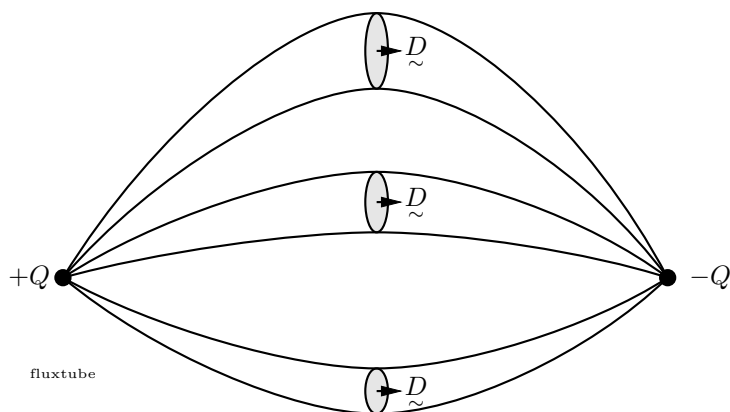


Figure 22: Tubes of flux.

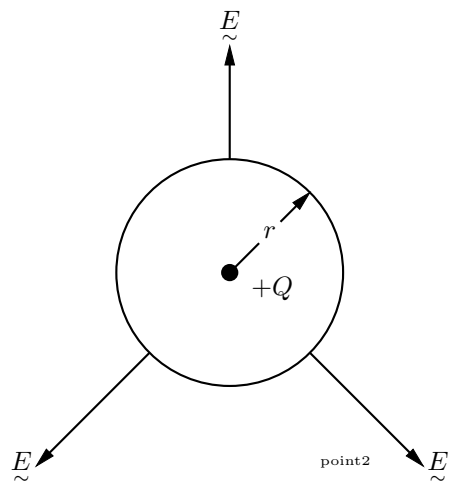


Figure 23: Point charge surrounded by surface

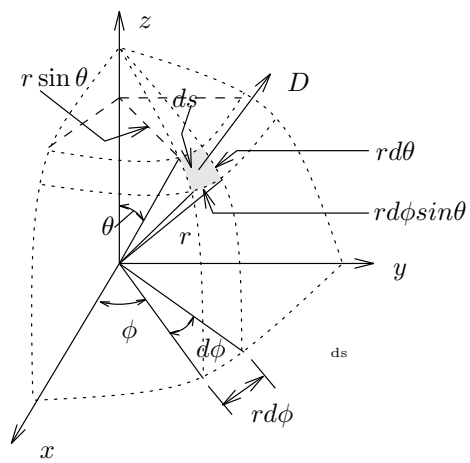


Figure 24: Incremental surface area

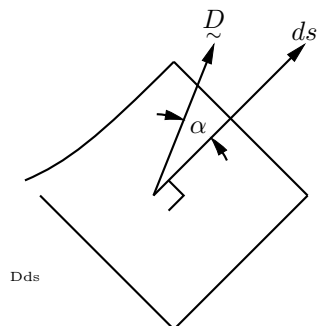


Figure 25: Relation of  $D$  to the normal vector

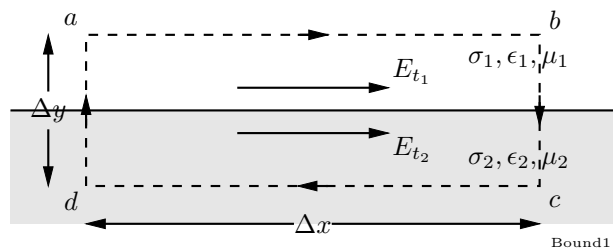


Figure 26: Tangential fields at boundary between two Dielectrics

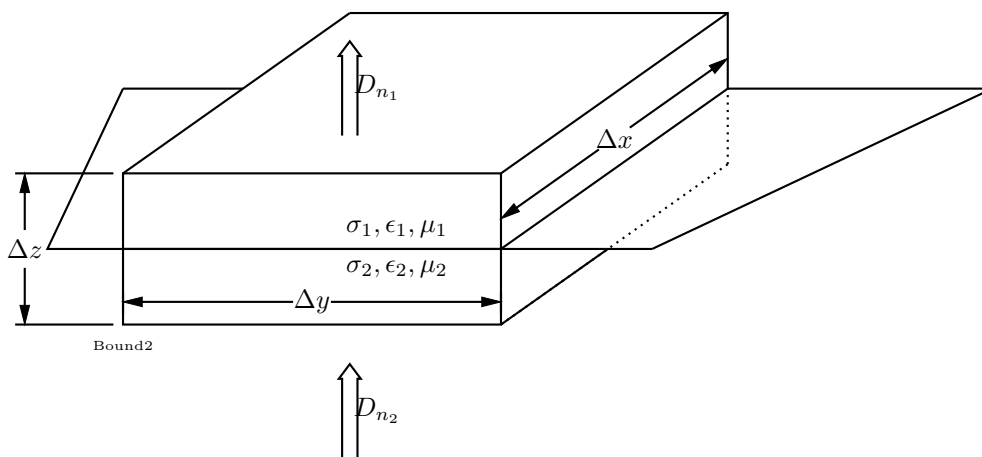


Figure 27: Normal fields at dielectric boundaries

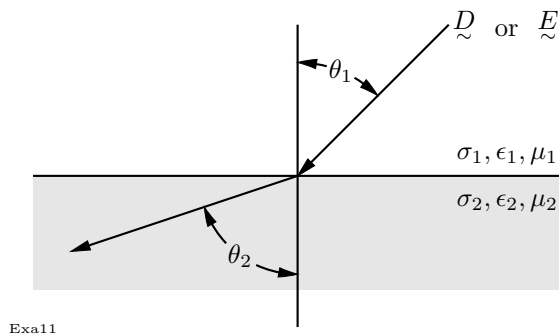


Figure 28: Resultant wavefront angle in dielectric boundary

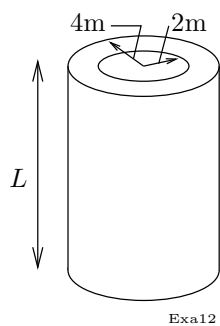


Figure 29: Hollow dielectric cylinder in air



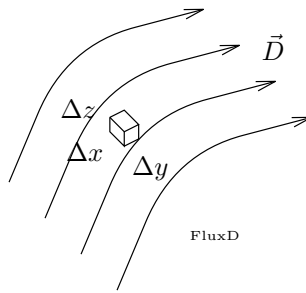


Figure 30: Flux in a space region containing free charge

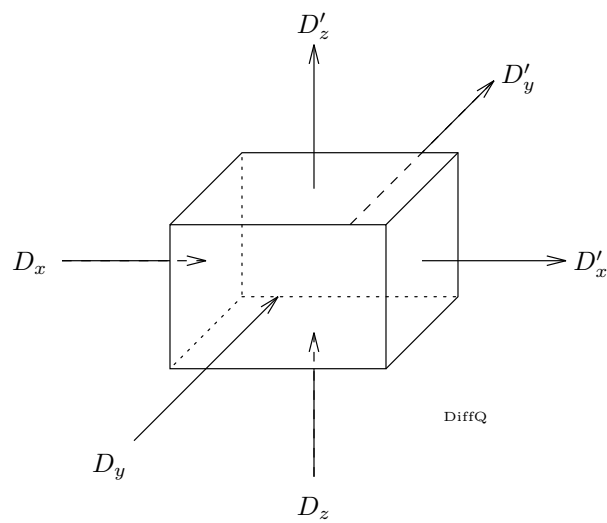


Figure 31: Difference in flux due to space charge

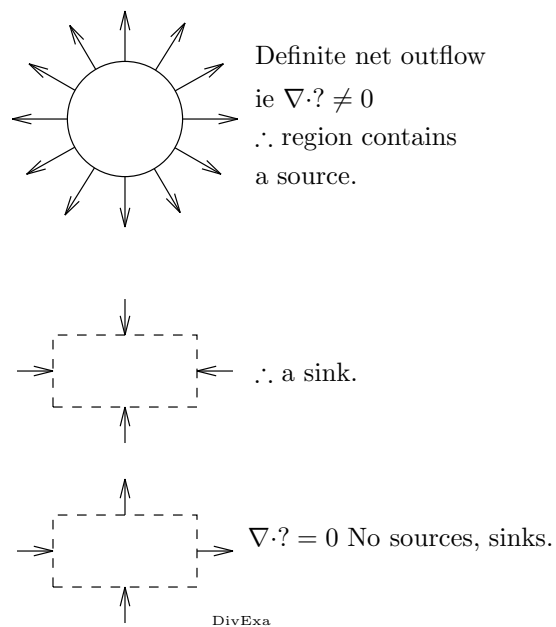


Figure 32: Examples of Divergence

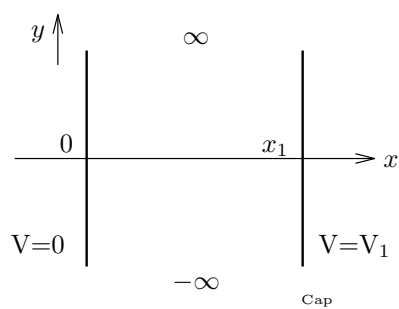


Figure 33: Parallel plate capacitor

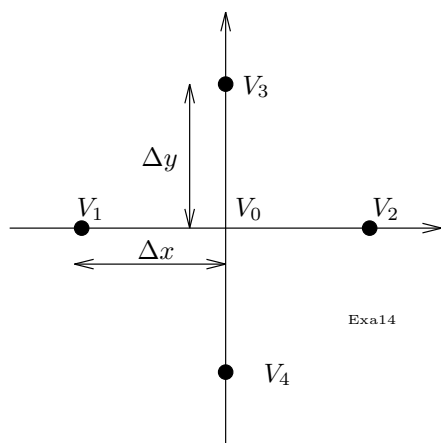


Figure 34: Equispaced charges

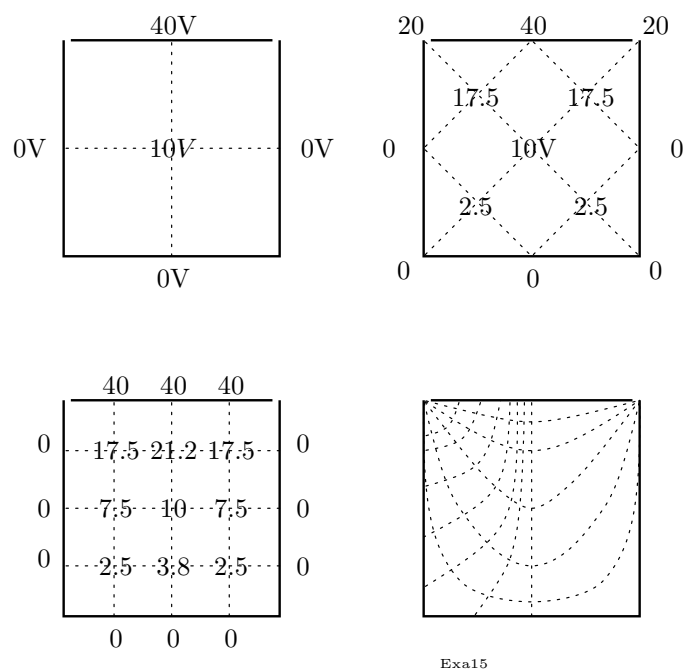


Figure 35: Repetitive Laplace on trough.