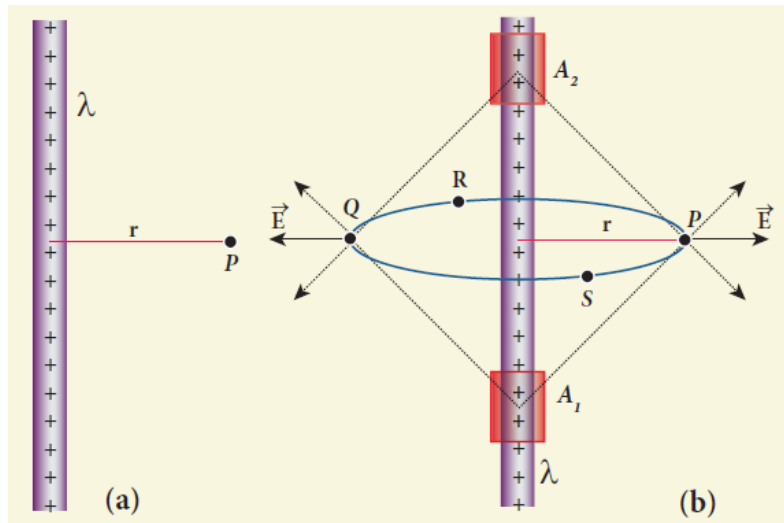


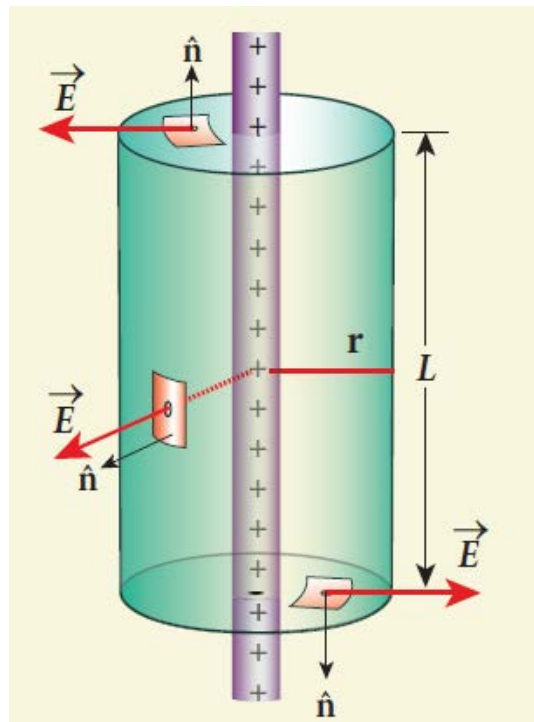
Applications of Gauss law

Electric field due to any arbitrary charge configuration can be calculated using Coulomb's law or Gauss law. If the charge configuration possesses some kind of symmetry, then Gauss law is a very efficient way to calculate the electric field. It is illustrated in the following cases.

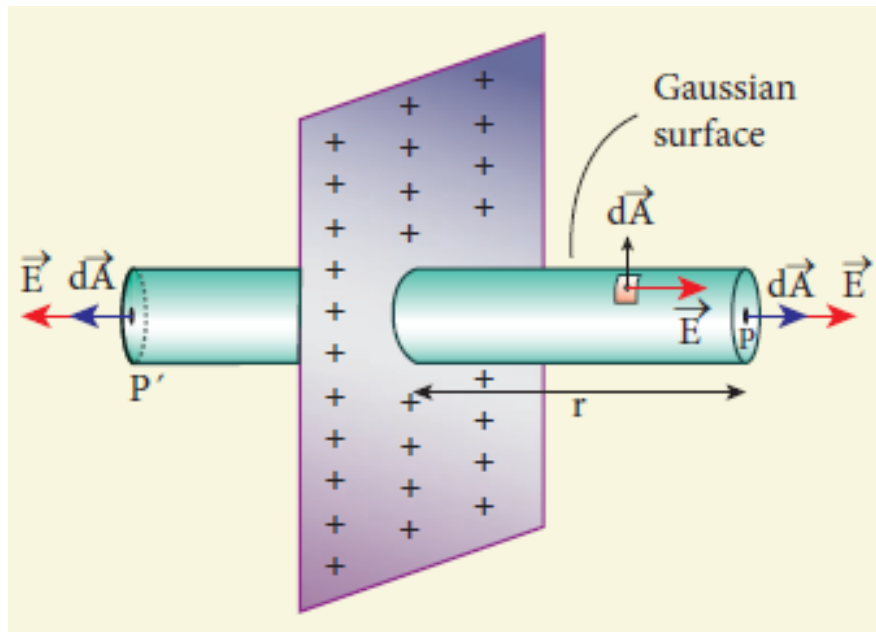
(i) Electric field due to an infinitely long charged wire



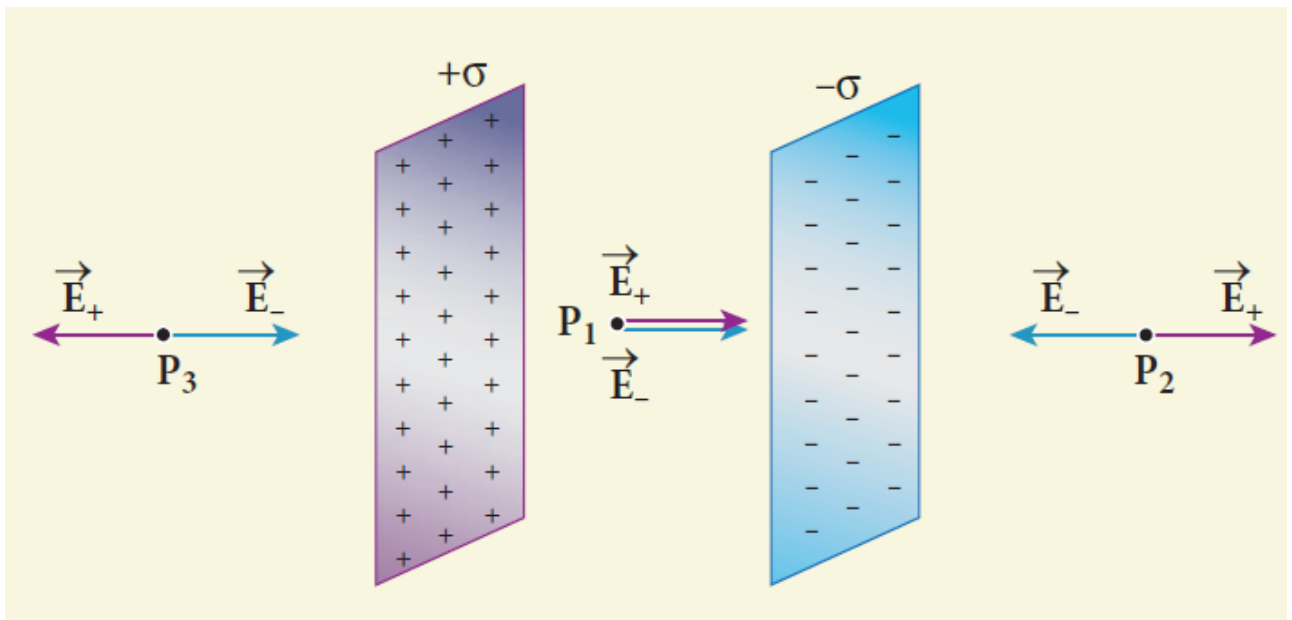
(ii) Cylindrical Gaussian surface



(iii) Electric field due to charged infinite planar sheet



(iv) Electric field due to two parallel charged sheets



(v) The electric field due to a charged spherical shell

