

Electric Field Produced by a Point Charge Moving with Constant Velocity

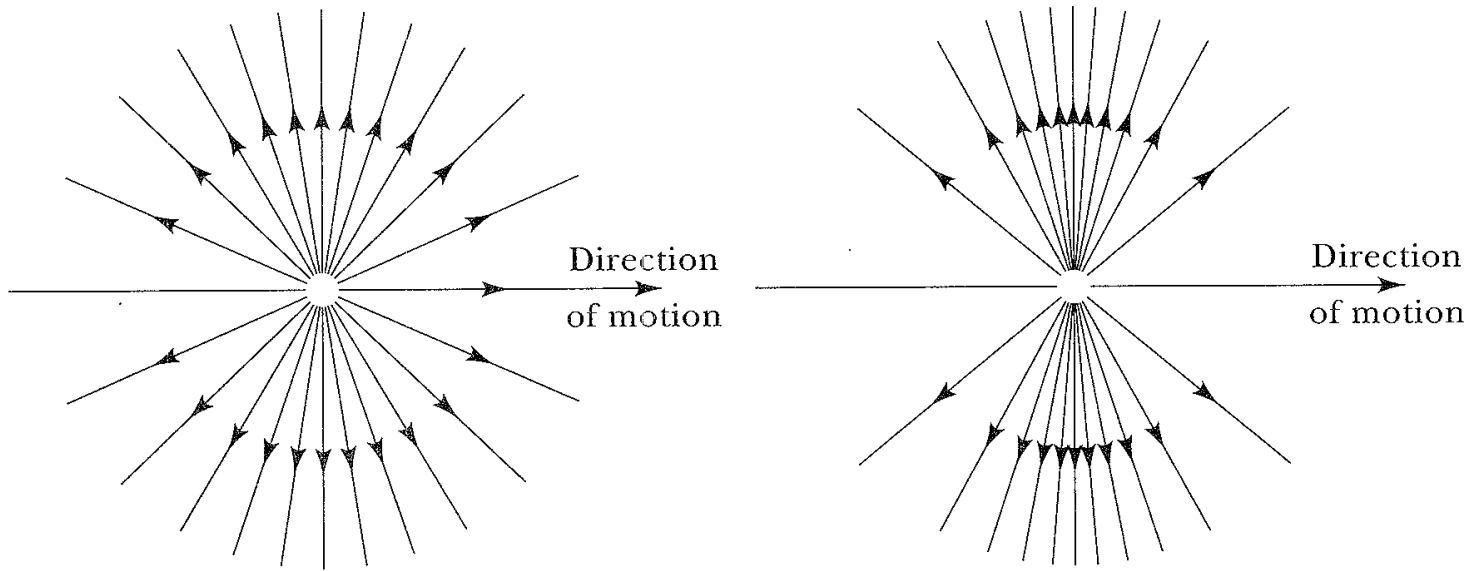


Figure 1: Electric field lines for $\beta = 0.7$ (left) and $\beta = 0.95$ (right) [1].

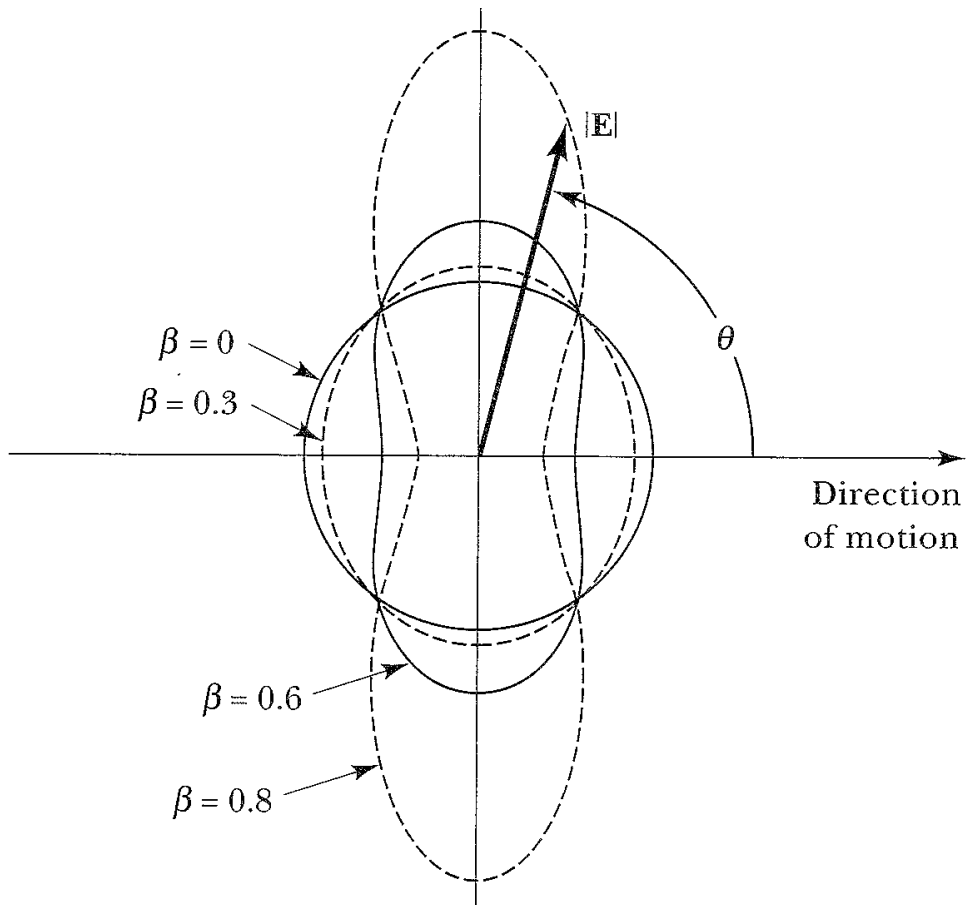


Figure 2: $|\mathbf{E}|$ at constant distance, R , from the moving charge, shown as function of angle to direction of motion, θ , for different values of β [1].

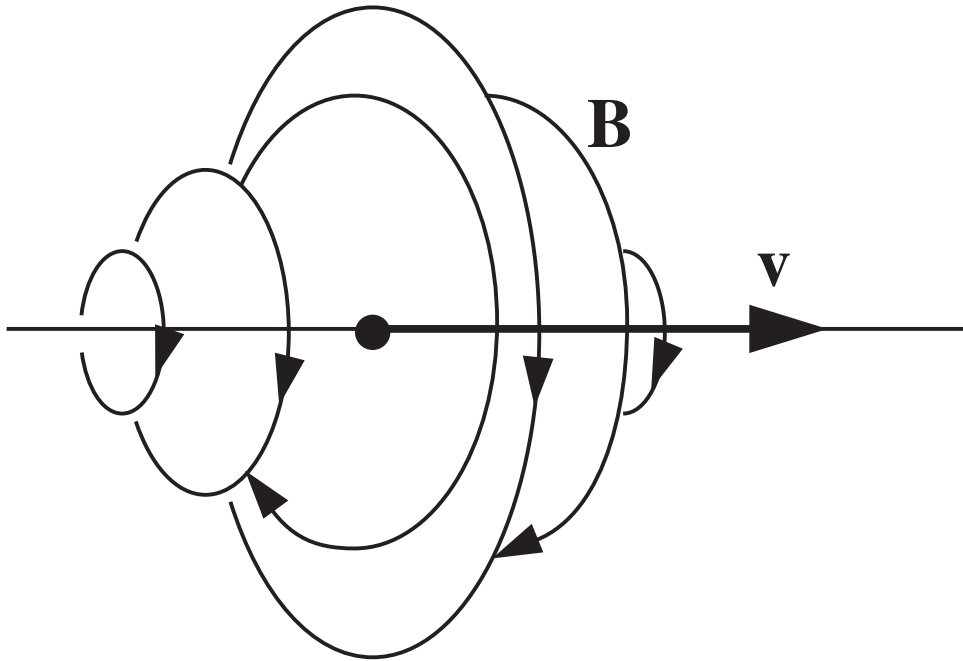


Figure 3: Lines of \mathbf{B} relative to direction of motion. [2].

References

- [1] '*Classical Electromagnetic Radiation (3rd edition)*', M.A.Heald and J.B.Marion, Saunders College Publishing.
- [2] '*Introduction to Electrodynamics (4th edition)*', D.J.Griffiths, Pearson Education.