

Figure 6.1 *Helical motion of a particle in a uniform magnetic field.*

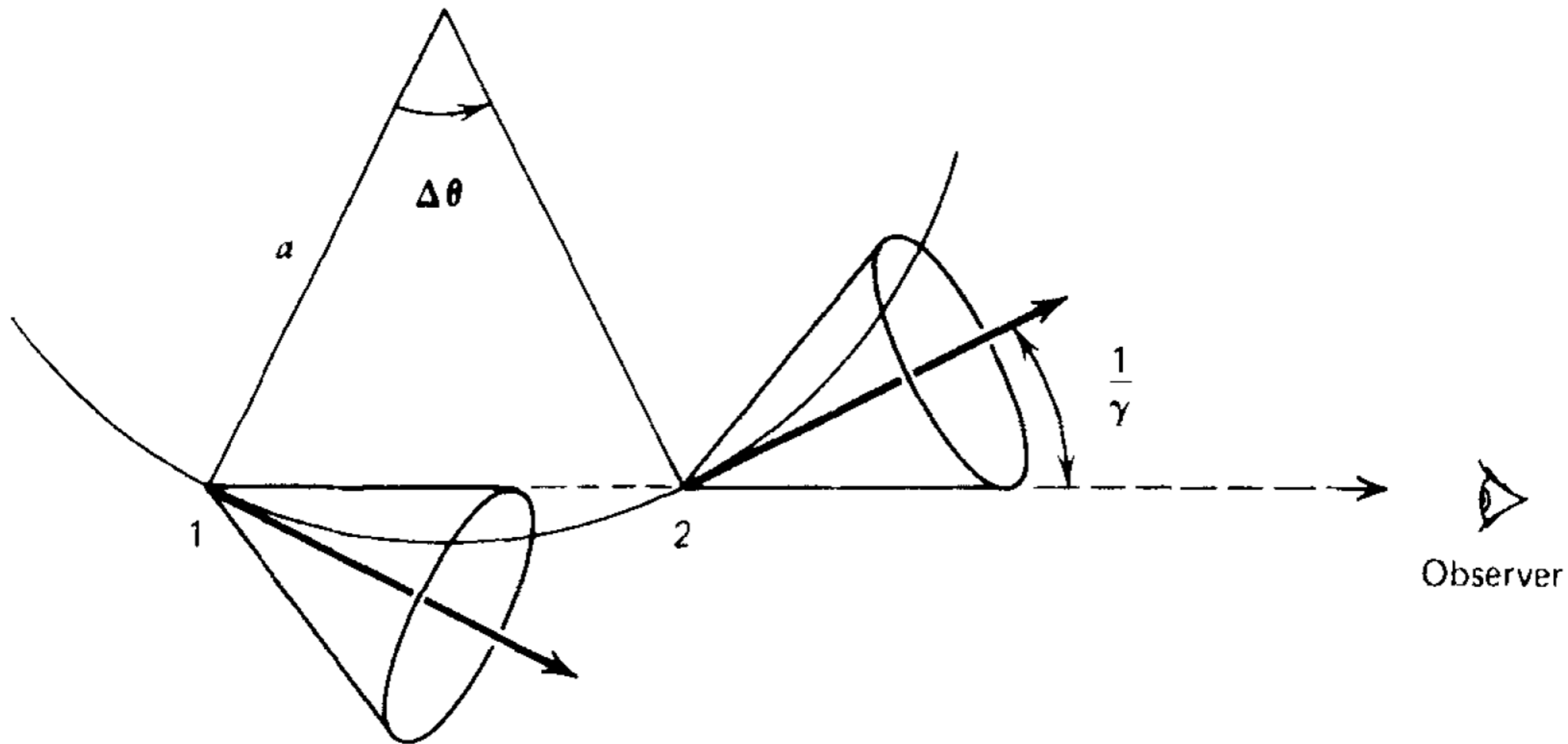


Figure 6.2 *Emission cones at various points of an accelerated particle's trajectory.*

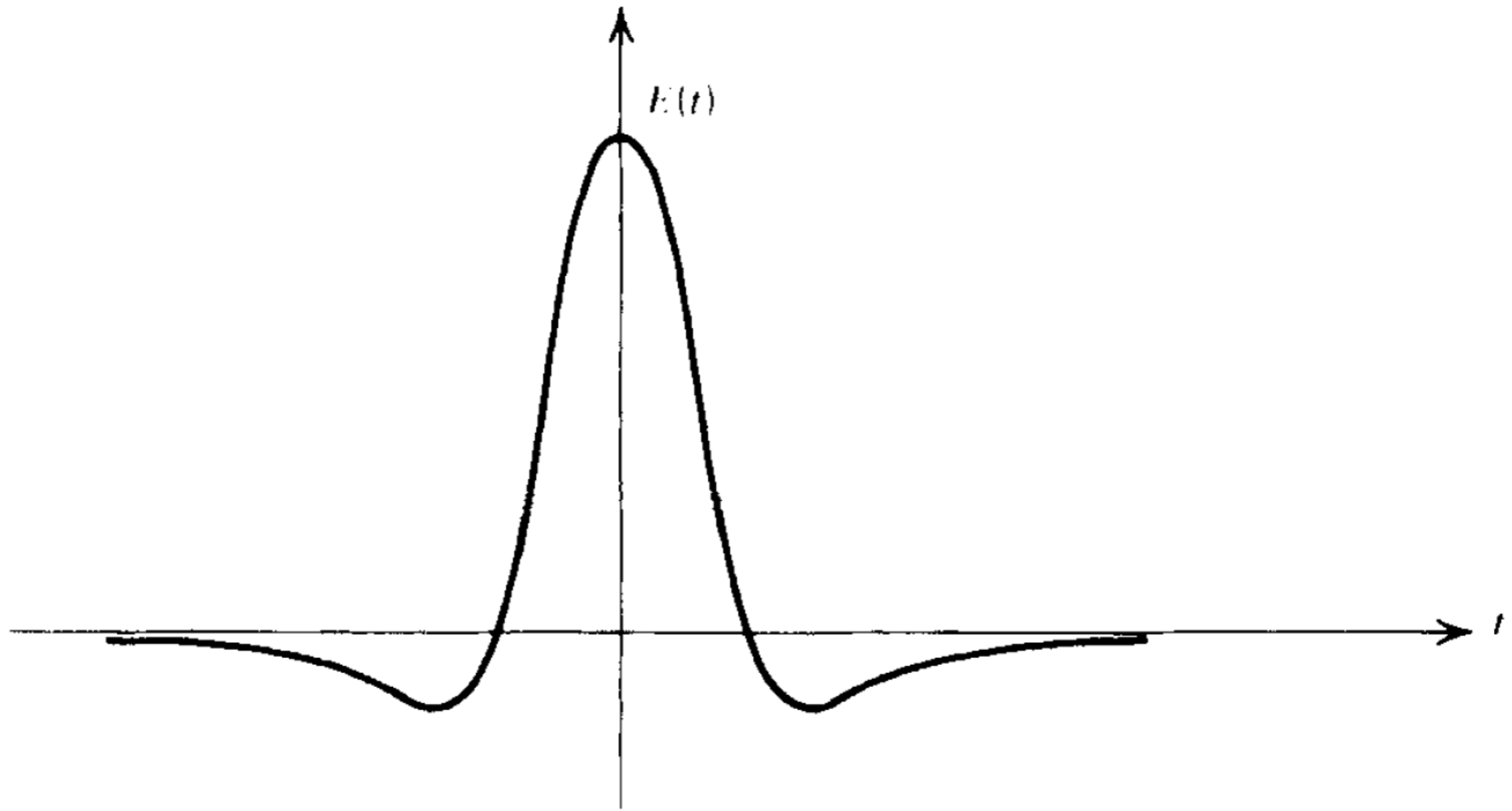
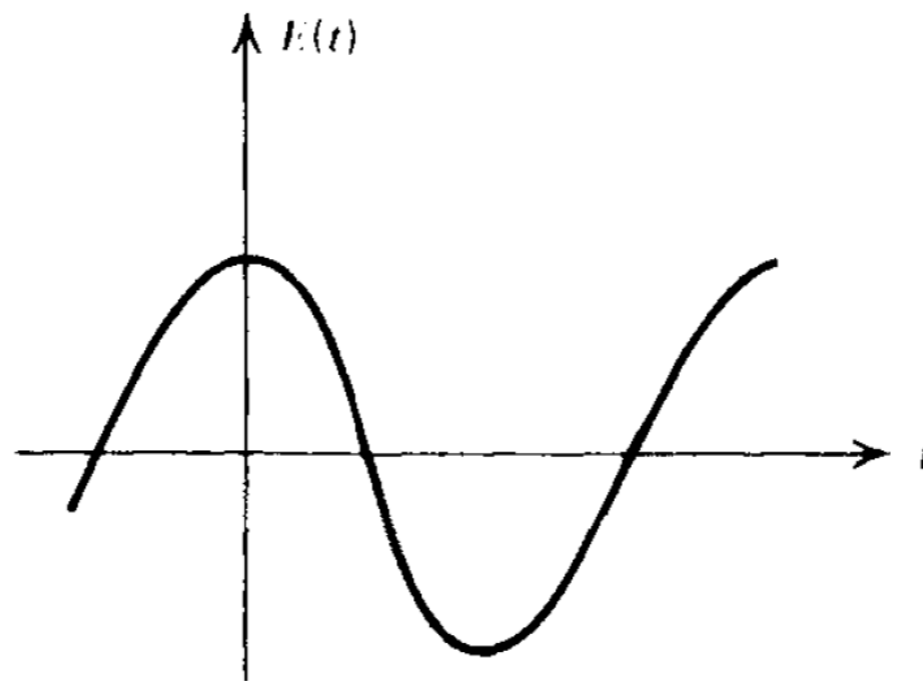
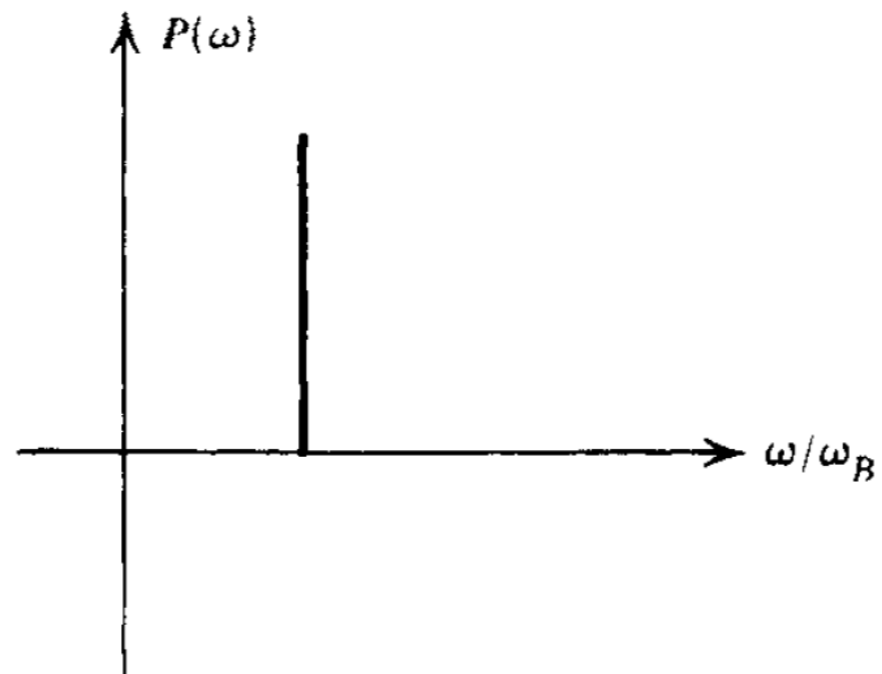


Figure 6.3 *Time-dependence of the electric field in a pulse of synchrotron radiation.*



(a)

Figure 6.8a Time dependence of electric field from slowly moving particle in a magnetic field (cyclotron radiation).



(b)

Figure 6.8b Power spectrum for a.

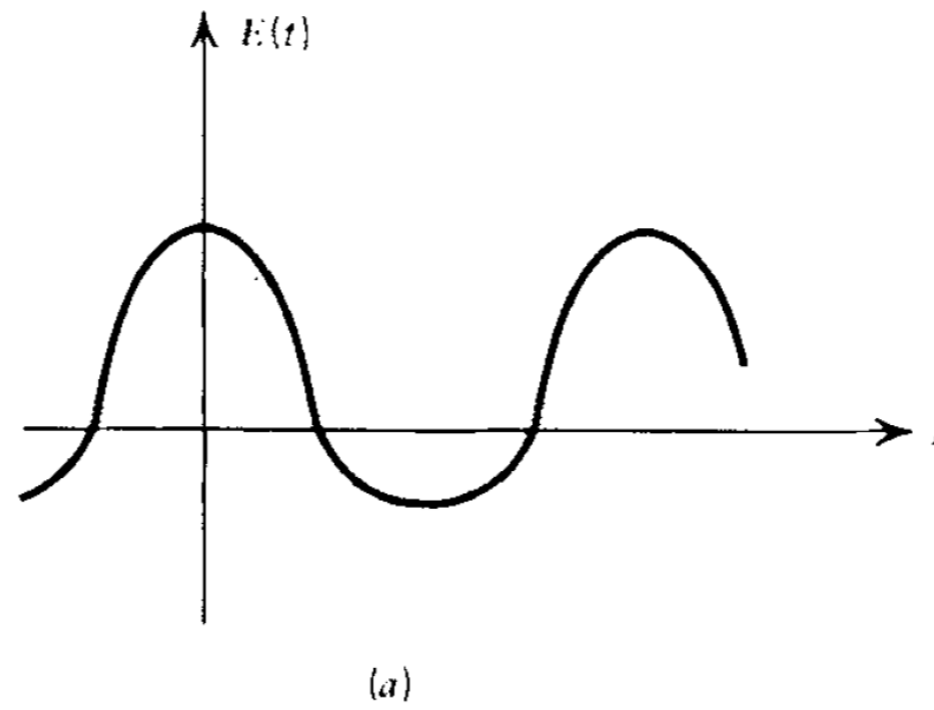


Figure 6.9a Time dependence of electric field from a particle of intermediate velocity in a magnetic field.

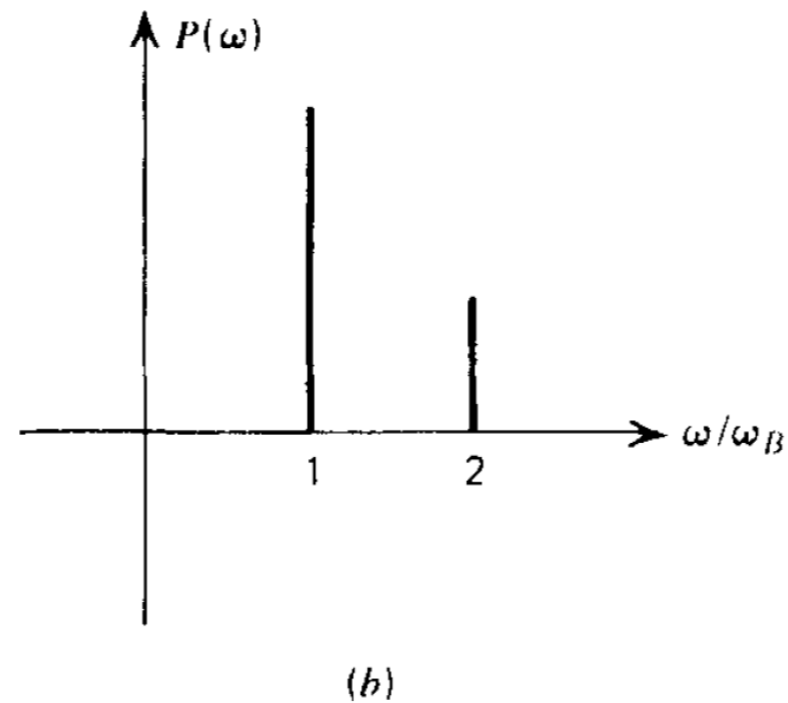
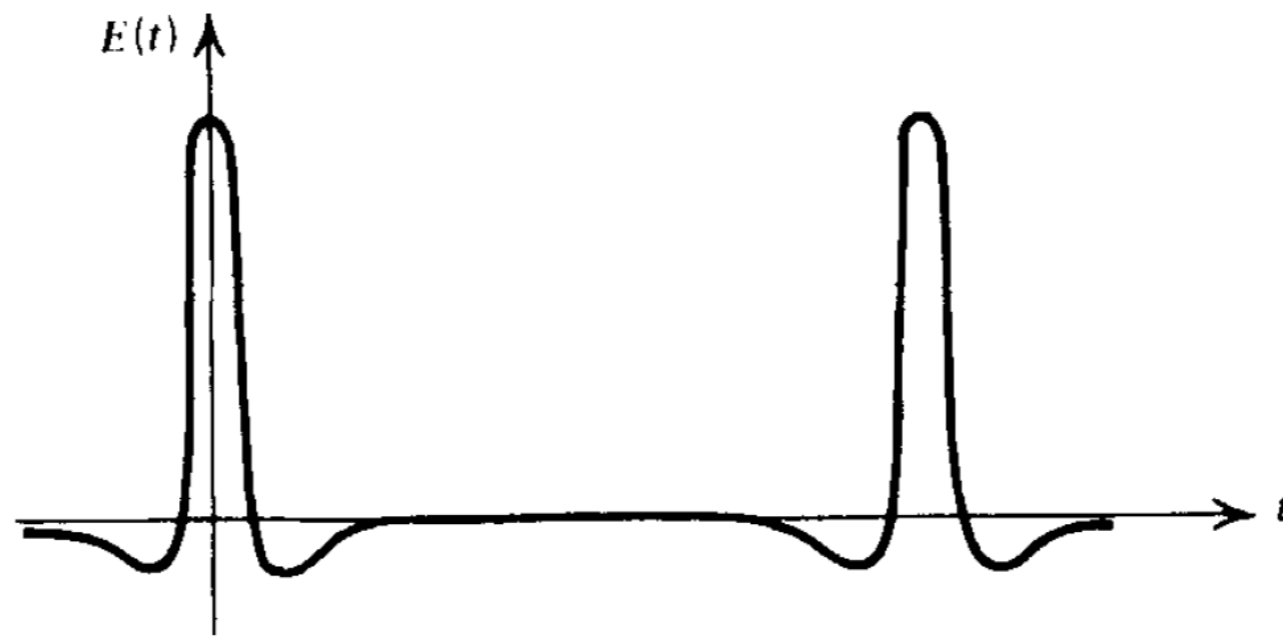
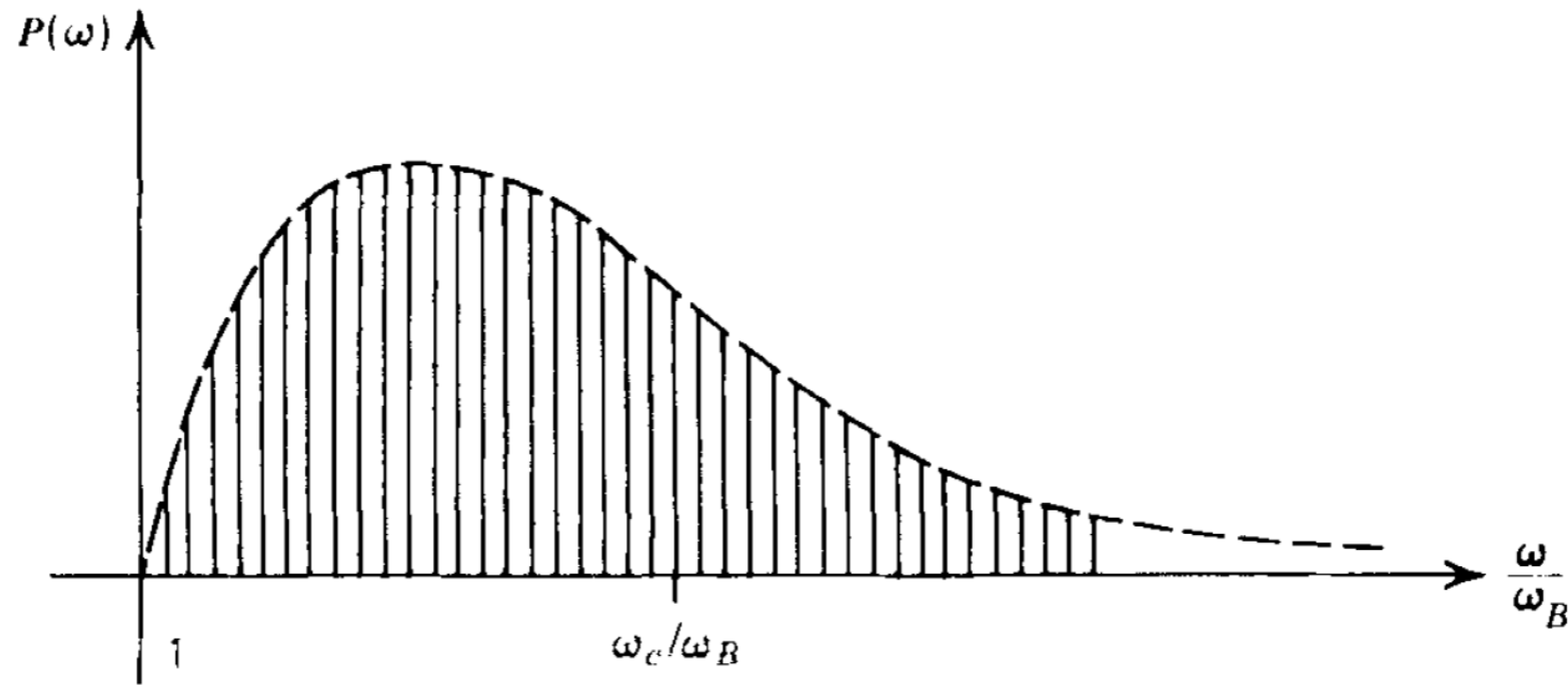


Figure 6.9b Power spectrum for a.



(a)

Figure 6.10a Time dependence of electric field from a rapidly moving particle in a magnetic field (synchrotron radiation).



(b)

Figure 6.10b Power spectrum for a.

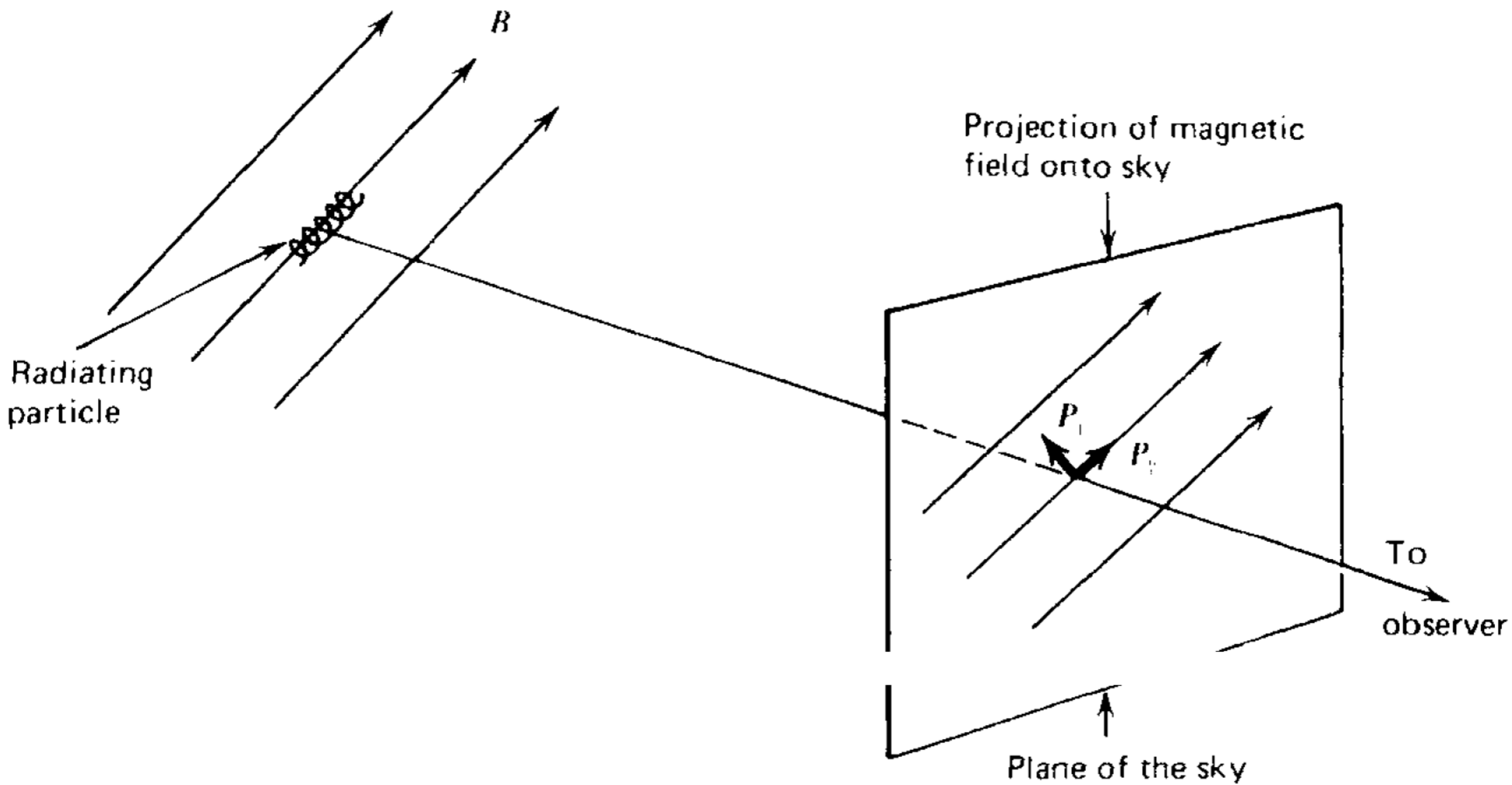


Figure 6.7 *Decomposition of synchrotron polarization vectors on the plane of the sky.*

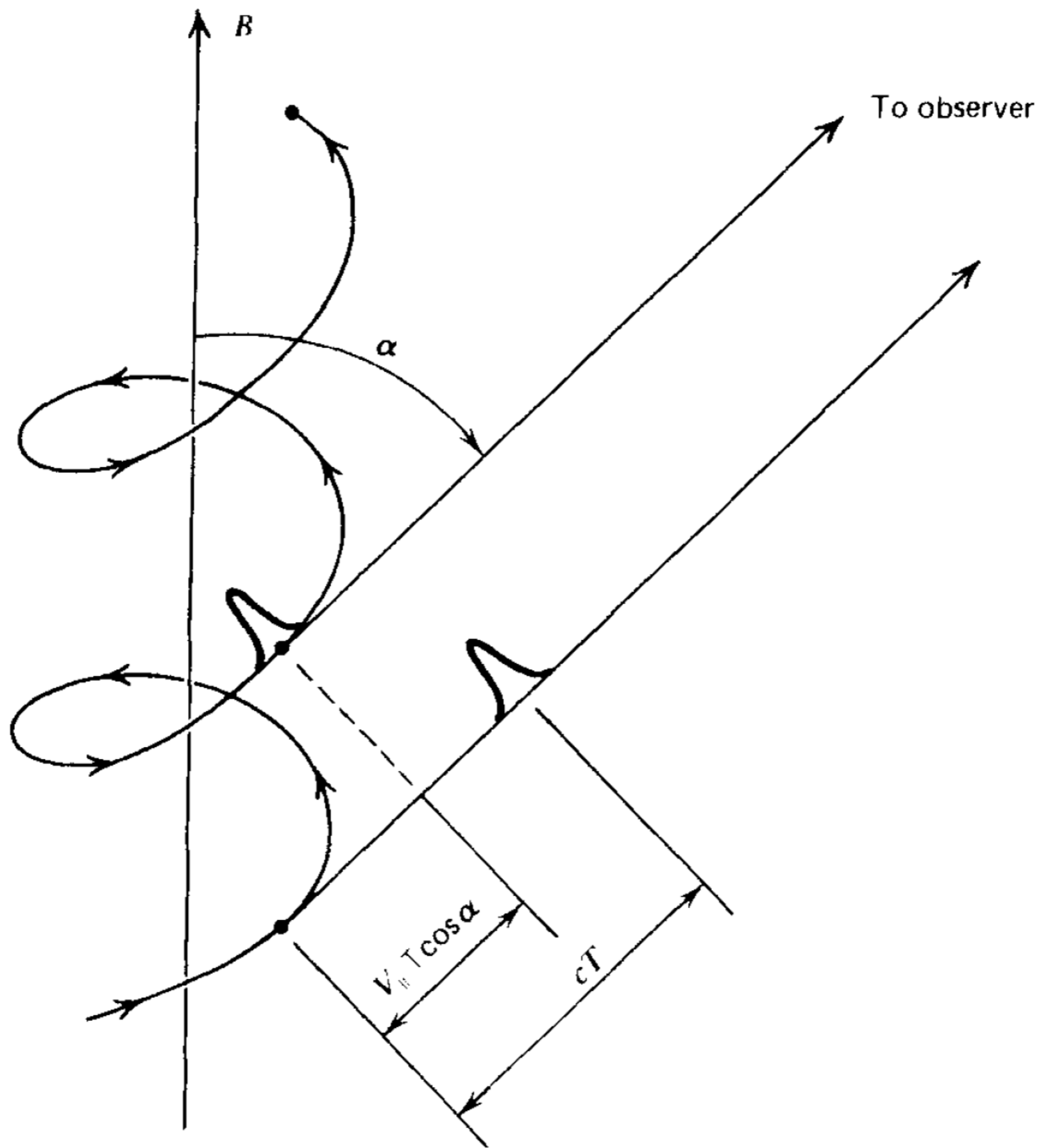


Figure 6.11 Doppler shift of synchrotron radiation emitted by a particle moving toward the observer.

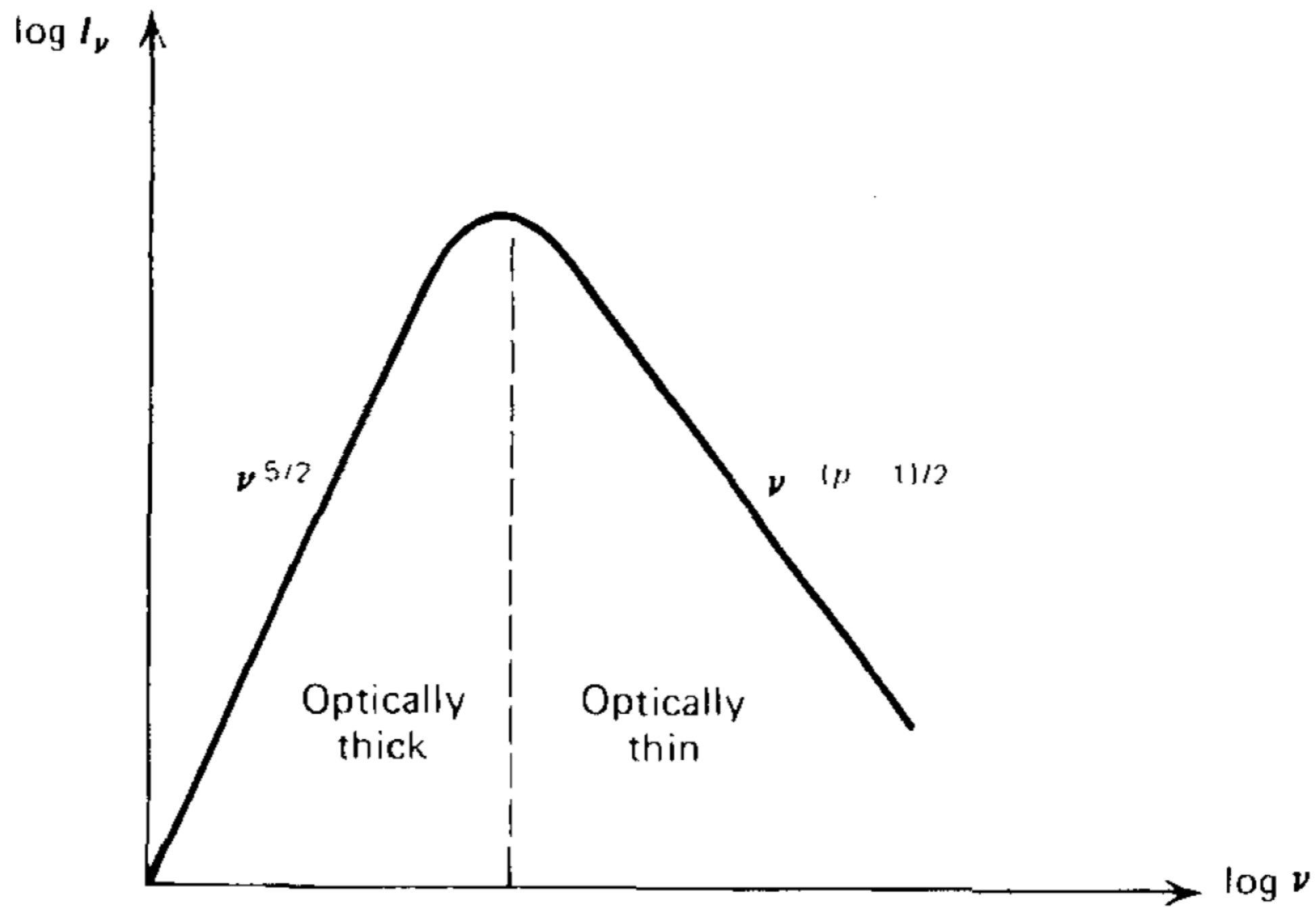


Figure 6.12 *Synchrotron spectrum from a power-law distribution of electrons.*