

Questions

1. For a transformation to be a symmetry, what condition must be satisfied?
2. How are symmetries and conservation laws related? Give an example that involves a discrete symmetry.
4. How are symmetries and conserved currents related? Give an example.
5. List the discrete space-time symmetries and the interactions for which they are symmetries.
6. For what interactions is the charge conjugation transformation a good symmetry?
7. For what kinds of particles can a C quantum number be defined?
8. What is the symmetry associated with the conservation of EM charge?
9. What is the Λ lifetime? Do you think its decay is strong, EM, or weak?