

Flaws of Modern Physics

Misleading Assumptions:

1. Time is homogeneous; all the fundamental parameters of Nature are universal constants.
2. Einstein's GTR is applicable to the entire universe.
3. Gravitation is scale-invariant.
4. Physical matter, of any kind whatsoever, is detectable in principle (it can interact with an adequate detector).
5. The gravitational mass of a particle is proportional to its inertial mass.
6. An origin can be physically affected only by its past cone.
7. Rutherford's atomic model is essentially correct.
8. The hypothesis of the strong and weak nuclear interactions
9. A false rule that is derived from the above misleading subatomic dynamics: Any coexistence of quarks and leptons in one sub-atomic particle is impossible.
10. A macroscopic body can be in a state of superposition.
11. A decrease of the entropy of a cosmological system never takes place; there is no inverse cosmological process to thermonuclear fusion.
12. All kinds of radiation emitted by antimatter are equally absorbable by matter.
13. The cosmological red-shift and the cosmological background radiation result from a universal expansion; Hubble law is correct.

Misinterpreted or Unexplained Observations:

1. Cosmological red shift
2. Cosmological background radiation
3. High-energy cosmic rays
4. Abundance of helium
5. Non-uniform distribution of matter in the universe
6. Cosmological regions of extremely different states in one galaxy
7. Glowing nebulas
8. Newborn stars rich in hydrogen
9. The universe is not in a process of gravitational collapse
10. Quasars
11. Globular clusters
12. Cosmic radio sources
13. The dynamics of spiral galaxies
14. Neutrino oscillations
15. Neutral kaons
16. Instability of subatomic particles which, according to the Standard Model, are non-composite particles
17. Earth's hot core
18. Observations of very large cosmological structures existing at time when the universe according to the big bang model was very young and very small

19. The boson observed at 2012 in CERN, which is misinterpreted as a Higgs boson
20. Cosmological jets and relativistic jets