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 large-scale cosmology.

3. At the subatomic level gravitation and electricity operate at the same mode at which they operate at the macroscopic level.

4. The gravitational mass of a particle is proportional to its inertial mass.

5. An origin can be physically affected only by its past cone.

6. Rutherford's atomic model is essentially correct.

7. In addition to gravitation and electricity there are also the strong and the weak interactions.

8. A false rule that is derived from the above misleading subatomic dynamics: Coexistence of quarks and leptons in one sub-atomic particle is excluded.

9. Space-time is four-dimensional.

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.

14. The symmetry between matter and antimatter had been broken.

Misinterpreted or Unexplained Observations:

1. Cosmological red shift

2. Cosmological background radiation

3. Cosmic rays

4. Abundance of helium in the universe

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 and spherical galaxies

12. Cosmic radio sources

13. The dynamics of spiral galaxies

14. Neutrino oscillations

15. Neutral kaons and other neutral mesons

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