Pictures of physics: theories and experiments

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Each chapter, to begin with, will be about 25 pages. This will expand.

1. Introduction.

Analysis. Understanding what is going on.

2. The astronomy of antiquity.

2.1. Groups act on elements using one operation. As such, their structure leads to theories of beauty and interest. But their application to theories of physics of the present day, like the theory of epicycles describing the cosmology of classical antiquity, the only available mathematics of its era, has led to misunderstandings that must be removed by, amongst other things, a more complete understanding of what is the correct philosophical stance in regard to the subject of experimental physics, and the development of a more complete and enriched mathematics.
2.3. The examples of Aristotle, Ptolemy and epicycles.
2.4 Geometry.
2.5 Occam's razor and transference.

3. The Copernican revolution.

3.1. Aristarchus, Copernicus, Bruno, Galileo.
3.2. Tycho Brahe, Kepler, Newton.
3.3. Calculus.

4. Quantum mechanics – reality as observations.

4.1. Unthinkable theory.
4.2. Bohr, Heisenberg, Dirac, Feynmann.
4.3. von Neumann's no go theorem.
4.4. Guiliano.
4.5. Weyl and groups.

5. Quantum mechanics – reality as states.

5.1. Thinkable theory.
5.2. Schrodinger, Einstein, de Broglie, Bohm, Bell.
5.3. de Broglie Bohm quantum theory.
5.4. Nonconformity to the von Neumann no go theorem.

6. Quantum electrodynamics.

6.1. Karpus and Kroll.
6.2. The Lamb shift.
6.3. de Broglie Bohm QED.

7. Superexponential algebra.

7.1. Superexponential algebra.
7.2. The theory of novanions.
7.3. The theory of branched spaces.
7.4. Relativity with base point.
7.5. Nonexistence of entanglement.

8. The new physics and experiment.

8.1. The electroweak interaction.
8.2. Gravitation.
8.3. The strong interaction.

9. The standard model.

9.1. The standard model.
9.2. Neutrino physics.
9.3. Symmetries of what?
9.4. Transference.

10. Novanion physics.

10.1. Cosmology.
10.2. Pictures of the electroweak interaction.
10.3. Pictures of the gravitational interaction.
10.4. Pictures of the strong interaction.