

Content

A Abstract	1-4
B Remarks on the Physicist Burkhard Heim*	1-2
C About the State of the Elementary Particle- and Geometrised Physics*	
1. The Fields of Interaction and the Masses of Elementary Particles in the Standard-Model of Particle Physics	1-6
2. Theories with Geometrically Structured Particles	7-9
3. Problems in Elementary Particle Physics and the Requirement for a Structure Theory of Particles	10
D On the Derivation of Heim's Mass Formula*	
1. Gravitation in the Microscopic Domain	1-6
2. Solution of the 6-dimensional Field Equations for the Microscopic Domain	
2.1 The Three Structure Units of the World	7-9
2.2 Solutions of the Field Equations for the Four Hermetry-Forms	10-12
2.3 Theoretical Fixing of the Elementary Charge and of the Fine-structure-Constant	13-16
3. The Polymetric Geometry	
3.1 The Polymetric Field Equations	17-21
3.2 Correlations of the Partial Structures and their Extrema	22-24
3.3 Groups of Couplings and Condensor Fluxes	25-27
4. Microscopic Structure Dynamic: the Reason of Inertia	
4.1 Condensor Fluxes	28-31
4.2 The Inertia of all Hermetry Forms	32-33
5. Prototypical Basic Fluxes and Prototrope Conjunctors	34-38
6. The Geometrical Reasons of Spin, Isospin, Helicity, and Anti-Structures	39-43
7. Determination of the Sum of Partial Masses in an Elementary Structure	44-51
8. Fine-Structure Constant and the Electromagnetic Field	52-60
9. Basic States of the Elementary Particles and "Quarks"	61-66
10. Limits of Excitation of Resonance and Masses of the Neutrino States	67-72
11. Experimental Confirmations of Heim's Structure Theory	73-74
E Heim's Mass Formula (1982)	1-9
F Heim's Mass Formula (1989)	10-18
G Selected Results:	1-13
Theoretical Values of the Masses of Elementary Particles (Basic States and Resonances), Mean Lifetimes of Basic States, Masses of Neutrinos, Sommerfeld Fine-structure Constant, Influence of the Value of the Gravitational Constant on the Masses of Basic States	
H References	

* Not yet available in English