



II. The Standard Model in the Isotopic Foldy-Wouthuysen Representation without Higgs Bosons in the Fermion Sector. Spontaneous Breaking of Parity and "Dark Matter" Problems

V. P. Neznamov

(Submitted on 4 Jul 2011 (v1), last revised 27 Dec 2011 (this version, v3))

The Standard Model with massive fermions is formulated in the isotopic Foldy-Wouthuysen representation. $SU(2) \times U(1)$ - invariance of the theory in this representation is independent of whether fermions possess mass or not, and, consequently, it is not necessary to introduce interactions between Higgs bosons and fermions. The study discusses a possible relation between spontaneous breaking of parity in the isotopic Foldy-Wouthuysen representation and the composition of elementary particles of "dark matter".

Comments: 12 pages

Subjects: **General Physics (physics.gen-ph)**

Cite as: [arXiv:1107.0693](#) [physics.gen-ph]

(or [arXiv:1107.0693v3](#) [physics.gen-ph] for this version)

Submission history

From: Vasilij P. Neznamov [[view email](#)]

[v1] Mon, 4 Jul 2011 18:08:46 GMT (208kb)

[v2] Wed, 6 Jul 2011 15:15:00 GMT (208kb)

[v3] Tue, 27 Dec 2011 16:17:48 GMT (169kb)

[Which authors of this paper are endorsers?](#)

Link back to: [arXiv](#), [form interface](#), [contact](#).

Download:

- [PDF only](#)

Current browse context:

physics.gen-ph

[< prev](#) | [next >](#)

[new](#) | [recent](#) | [1107](#)

Change to browse by:

[physics](#)

References & Citations

- [NASA ADS](#)

Bookmark([what is this?](#))

