

Possible Dynamical Mechanism Generating SU_3 and SU_2 Symmetry Breaking.

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(*Nuovo Cimento A*, **79**, 57 (1984))

PACS. 11.30. - Symmetry and conservation laws.

After publication, we realized that the following amendments are necessary, which in no way affect the conclusions nor the numerical results of the paper.

Equation (16) should read:

$$(16) \quad H_{\text{eff}} = 2g_{\text{SBB}}(\bar{d}_{s,s}.d^{jj} + f_{s,s}.iff^{ji})\bar{B}^f S^j B^i.$$

The last paragraph on p. 65, up to eqs. (18), should be rearranged to:

« As will be required for a consistent interpretation of the scalar-tadpole theory, and is also suggested from valence quark model considerations to which we will return in sect. 5, we use in eq. (16) the same $(\bar{d}/f)_{s,s}$, as in the octet baryon mass formula ... ».

Equations (20a), (20b), (24a), (24b), (25a), (25b), (27a) and (27b) should read, respectively,

$$(20a) \quad m_{\Sigma}^2 - m_{N'}^2 = -f_x g_{\text{SBB}}(f - \bar{d})_{s,s}(m_{\Sigma} + m_{N'}) - (m_s - m_u)_{\text{curr}} \langle n|\bar{u}s|\Sigma^- \rangle^{\text{NP}},$$

$$(20b) \quad m_{\Xi}^2 - m_{\Sigma}^2 = -f_x g_{\text{SBB}}(m_{\Xi} + m_{\Sigma}) + (m_s - m_u)_{\text{curr}} \langle \Sigma^+|\bar{u}s|\Xi^0 \rangle^{\text{NP}},$$

$$(24a) \quad -f_x = \frac{2(m_{\Sigma} - m_{N'})}{g_{\text{SBB}}(f - \bar{d})_{s,s}} \approx 24 \text{ MeV},$$

$$(24b) \quad -f_x = \frac{2(m_{\Xi} - m_{\Sigma})}{g_{\text{SBB}}} \approx 24 \text{ MeV},$$

$$(25a) \quad (m_n^2 - m_p^2)_{\text{tad}} = -2f_\delta g_{\text{SBB}} m_\Lambda + (m_d - m_u)_{\text{curr}} \langle p | \bar{u}d | n \rangle^{\text{NP}},$$

$$(25b) \quad (m_\Xi^2 - m_{\Xi^0}^2)_{\text{tad}} = -2f_\delta g_{\text{SBB}} m_\Xi (f - d)_{e.m.} - (m_d - m_u)_{\text{curr}} \langle \Xi^0 | \bar{u}d | \Xi^- \rangle^{\text{NP}},$$

$$(27a) \quad -f_\delta \approx \frac{2(m_n - m_p)_{\text{tad}}}{g_{\text{SBB}}},$$

$$(27b) \quad -f_\delta \approx \frac{2(m_\Xi - m_{\Xi^0})}{g_{\text{SBB}}(f - d)_{e.m.}}.$$

Equations (28) should be changed into

$$(28a) \quad -f_\delta \approx 0.51 \text{ MeV},$$

$$(28b) \quad -f_\delta \approx 0.51 \text{ MeV}.$$

The first statement on p. 70, including eq. (31a), should be deleted.