

**Possible Dynamical Mechanism Generating  $SU_3$  and  $SU_2$  Symmetry Breaking.**

N. PAVER

*Istituto di Fisica Teorica dell'Università - Trieste, Italia*  
*Istituto Nazionale di Fisica Nucleare - Sezione di Trieste, Italia*  
*Scuola Internazionale Superiore di Studi Avanzati - Trieste, Italia*

M. D. SCADRON

*Scuola Internazionale Superiore di Studi Avanzati - Trieste, Italia*

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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,

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

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

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

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

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

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

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

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

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.