

Lichtenberg (cont'd)

$$6 \times 3 = 10 + 8$$

d g

$SU(6) = \text{broken}$

$$9 \times 9 \rightarrow 6 \times 6 = 21 + 15$$

sym. anti.

$$B = d \times g \Rightarrow 21 \times 6 = 56 + 10$$

$$C = g \times g \times g \rightarrow 6 \times 6 \times 6 = 56 + 20 + 20 + 20$$

$(SU(6), D_3)$

————— $(56, 2^+)$

————— $(10, 1^-)$

————— $(56, 0^+)$

$2 \cdot 8 + 4 \cdot 10$

Mitra:

van Nambu: Integral charge, 3-triplet
 (charm number)

	Q	Q	Q	average Q	} $\rightarrow \frac{\mu_p}{\mu_{n_i}} = -\frac{3}{2}$
$q_1(\lambda)$	1	1	0	$\frac{2}{3}$	
$q_2(\lambda)$	0	0	-1	$-\frac{1}{3}$	
$q_3(\lambda)$	0	0	-1	$-\frac{1}{3}$	

too many levels

Schwinger: dyon model
 electric and magnetic charges

$$\frac{emq}{4\pi} = 2n \quad (\text{Dirac: } \frac{emq}{4\pi} = \frac{n}{2})$$

From where extra degrees of freedom $\left[\begin{matrix} d_1 \\ d_2 \\ d_3 \end{matrix} \right]$

licht (contin.)
 d_1 $\left(\frac{2}{3}, \frac{2}{3}, \frac{2}{3} \right)$
 d_2 $\frac{2}{3}$
 d_3 $\frac{2}{3}$

q-particles

duality