

Q55-04)

$$A = \bar{\bar{e}}_{123} + \bar{\bar{e}}_{032} + 2\bar{\bar{e}}_{013} + 3\bar{\bar{e}}_{021}$$

$$m = \frac{1}{4}(\sqrt{3}e_1 + 2e_2 + 3e_3) + 4(-e_0)$$

$$A \vee m = \phi(\bar{\bar{e}}_{123} + \bar{\bar{e}}_{032} + 2\bar{\bar{e}}_{013} + 3\bar{\bar{e}}_{021})$$

$$\phi(\bar{\bar{e}}_{123}) + \phi(\bar{\bar{e}}_{032}) + 2\phi(\bar{\bar{e}}_{013}) + 3\phi(\bar{\bar{e}}_{021})$$

$$e_0 + e_1 + 2e_2 + 3e_3 \quad \left(\frac{1}{4}(\sqrt{3}e_1 + 2e_2 + 3e_3) + 4(-e_0) \right)$$

$$e_0 + e_1 + 3\bar{e}_2 + 3\bar{e}_3$$

$$\frac{1}{4} \left(\sqrt{3} \phi(\bar{e}_1) + 2\phi(\bar{e}_2) + 3\phi(\bar{e}_3) \right) + 4\phi(-e_0)$$

$$\frac{1}{4} \left(\sqrt{3} \bar{\bar{e}}_{032} + 2\bar{\bar{e}}_{013} + 3\bar{\bar{e}}_{021} \right) + 4(-\bar{\bar{e}}_{123})$$

$$(e_0 + e_1 + 2\bar{e}_2 + 3\bar{e}_3) \left(\frac{1}{4} \left(\sqrt{3} \bar{\bar{e}}_{032} + 2\bar{\bar{e}}_{013} + 3\bar{\bar{e}}_{021} \right) + 4(-\bar{\bar{e}}_{123}) \right)$$

$$(e_0 + e_1 + 2e_2 + 3e_3) \frac{1}{4} + (e_0 + e_1 + 2e_2 + e_3) \left(\sqrt{3} \bar{\bar{e}}_{032} + 2\bar{\bar{e}}_{013} + 3\bar{\bar{e}}_{021} \right)$$

$$+ (e_0 + e_1 + 2e_2 + 3e_3) (4(-\bar{\bar{e}}_{123}))$$

$$(e_0 + e_1 + 2e_2 + 3e_3) \frac{1}{4} = \left(\frac{1}{4}e_0 + \frac{1}{4}e_1 + \frac{2}{4}e_2 + \frac{3}{4}e_3 \right)$$

$$(e_0 + e_1 + 2e_2 + 3e_3) (\sqrt{3} \bar{e}_{032} + 2\bar{e}_{013} + 3\bar{e}_{021})$$

$$= -2.19 \bar{e}_{02} + 1.46 \bar{e}_{03} + 14.73^{(4)}$$

$$(e_0 + e_1 + 2e_2 + 3e_3) (4(-e_0)) = 4\bar{e}_{01} + 8\bar{e}_{02} + 12\bar{e}_{03}$$

$$\phi(A, m) \equiv A \vee m = -0.31699$$