

$$P_2 = \Gamma_{ij} x^i x^j$$

$$P_3 = \Gamma_{ijk} x^i x^j x^k$$

$$a = z_6 + i z_5 \quad \kappa = z_{10} + i z_9 \quad S = z_1,$$

$$c = z_8 + i z_7 \quad d = z_4 + i 0$$

$$\epsilon_6 = 12a\bar{a} + 56c\bar{c} + 24d^2 + 16\sqrt{5}ds \\ + 24x\bar{x} + 12s^2$$

$$\epsilon = 8\sqrt{2}(3d + \sqrt{5}s)a + 32c^2 + 48\bar{c}x$$

$$\delta = 192ac(3d + 2\sqrt{5}s) \\ + 144\sqrt{2}a^2\bar{c} + 160\sqrt{2}c^3 \\ + 144\sqrt{2}x(2d^2 + 2\sqrt{5}ds + 5c\bar{c} + 12s^2)$$

$$\zeta = 16\sqrt{2}c(25c\bar{c} + 18d^2 + 120s^2 + \\ 6a\bar{a} + 15x\bar{x} + 22\sqrt{5}ds) \\ + 48\sqrt{2}\bar{x}a^2 + 240\sqrt{2}\bar{c}^2x + 32\sqrt{5}sa\bar{c} \\ + 96(2d + \sqrt{5}s)(2a\bar{c} + a\bar{x})$$