

MZV の #

d_{nr}Z_r

$$Z_0 = \langle 1 \rangle_{\mathbb{Q}}$$

$$Z_1 = 0$$

$$Z_2 = \langle \pi^2 \rangle_{\mathbb{Q}}$$

$$Z_3 = \langle \zeta(3) \rangle_{\mathbb{Q}}$$

$$Z_4 = \langle \pi^4 \rangle_{\mathbb{Q}}$$

$$Z_5 = \langle \pi^4 \zeta(3), \zeta(5) \rangle_{\mathbb{Q}}$$

$$Z_6 = \langle \pi^6, \zeta(3)^2 \rangle_{\mathbb{Q}}$$

$$Z_7 = \langle \pi^4 \zeta(3), \pi^2 \zeta(5), \zeta(7) \rangle_{\mathbb{Q}}$$

$$Z_8 = \langle \pi^8, \pi^2 \zeta(3)^2, \zeta(3) \zeta(5), \zeta(3, 5) \rangle_{\mathbb{Q}}$$

$$Z_9 = \langle \pi^6 \zeta(3), \pi^4 \zeta(5), \pi^2 \zeta(7), \zeta(3)^3, \zeta(9) \rangle_{\mathbb{Q}}$$

$$Z_{10} = \langle \pi^{10}, \pi^4 \zeta(3)^2, \pi^2 \zeta(3) \zeta(5), \pi^2 \zeta(3, 5), \zeta(3) \zeta(7), \zeta(5)^2, \zeta(3, 7) \rangle_{\mathbb{Q}}$$

$$Z_{11} = \langle \pi^8 \zeta(3), \pi^6 \zeta(5), \pi^4 \zeta(7), \pi^2 \zeta(3)^3, \pi^2 \zeta(9), \zeta(3)^2 \zeta(5), \\ \zeta(3) \zeta(3, 5), \zeta(11), \zeta(2, 1, 8) \rangle_{\mathbb{Q}}$$

$$Z_{12} = \langle \pi^{12}, \pi^6 \zeta(3)^2, \pi^4 \zeta(3) \zeta(5), \pi^4 \zeta(3, 5), \pi^2 \zeta(3) \zeta(7), \\ \pi^2 \zeta(5)^2, \pi^2 \zeta(3, 7), \zeta(3)^4, \zeta(3) \zeta(9), \zeta(5) \zeta(7), \\ \zeta(3, 9), \zeta(2, 1, 1, 8) \rangle_{\mathbb{Q}}$$