Borcherds

$$\text{modular } {}^{q}\text{ɿ} = \sum q^{n} \mathop{\Big|}_{n}^{\infty i} \text{ɿ}$$

$$\Delta_{\text{eff}}\,(T{:}U) = 2\pi i\,(aT + bU) + \sum_{k \curlywedge \ell > 0} \log\Big(1 - \mathfrak{e}^{2\pi i\,(kT + \ell U)}\Big) \mathop{\Big|}_{k\ell}^{\infty i} \text{ɿ}$$

no Wilson lines=unbroken gauge symm

$$E_8 \times E_8'$$

$$\frac{1}{4}\Delta_{\text{eff}}\,(T{:}U) = 24\pi i a T - \sum_{k \curlywedge \ell > 0} \log\Big(1 - \mathfrak{e}^{2\pi i\,(kT + \ell U)}\Big) \mathop{\Big|}_{k\ell}^{\infty i} \frac{\big(E_2 E_4 - E_6\big)^2}{\eta^{24}}$$

$$E_8 \times E_8$$

$$\frac{1}{2}\Delta_{\text{eff}}\,(T{:}U) = 12\pi i\,(8T + 12U) - \sum_{k \curlywedge \ell > 0} \log\Big(1 - \mathfrak{e}^{2\pi i\,(kT + \ell U)}\Big) \mathop{\Big|}_{k\ell}^{\infty i} \frac{E_4\Big(E_2^2 E_4 - 2E_2 E_6 + E_4^2\Big)}{\eta^{24}}$$

$$\text{hol prepotential } \mathcal{G}_{T:U} = \sum_{k \curlywedge \ell > 0} \log_5\Big(\mathfrak{e}^{2\pi i\,(kT + \ell U)}\Big) \mathop{\Big|}_{k\ell}^{i\infty} \frac{E_4^2}{\eta^{24}}$$

$${}^{q}\log_p = \sum_{n > 0} \frac{q^n}{n^p}$$

$$\Delta_{\text{eff}}\,(T{:}U) = \partial_T^2\, \partial_U^2\, \mathcal{G}_{T:U}$$

symm enhancement

$$T = U{:}\quad \mathrm{SU}_2$$

$$T = U = i{:}\quad \mathrm{SU}_2 \times \mathrm{SU}_2$$

$$T = U = \varrho = \mathfrak{e}^{2\pi i/3}{:}\quad \mathrm{SU}_3$$