$$D = 7$$

$$E_8^4 = SL_5^{\mathbb{R}}: \quad \text{scalar coset } SL_5^{\mathbb{R}}/$$

$$E_7^4 GL_3^{\mathbb{R}}: \quad \text{scalar coset } GL_3^{\mathbb{R}}/O_3$$

$$E_6^4 = GL_2^{\mathbb{R}}: \quad \text{scalar coset } GL_2^{\mathbb{R}}/O_2$$

$$E_5^4 = \mathbb{R}: \quad \text{scalar coset } O_{1:1} \ni \text{ dilaton}$$

$$\begin{cases} \\ \\ \\ \end{cases} = \boxed{} + \overline{}^2 - \mathfrak{e}^{2\sqrt{2/5}} \overline{}^2$$

7-dim bosonic string

$$E_4^4 = 1$$

pure gravity

$$F_4^4 = 1$$

$$D_8^4 = O_{3:3} \times O_{1:1}: \quad \text{scalar coset } O_{3:3}/O_3 \times O_3 \times \mathbb{R}_>$$