

$$\text{Aut} | {}^3\mathbb{R}_3^{\mathfrak{U}} = {}^3\mathbb{R}_3^{\mathfrak{U}} = SU_3^{\mathbb{R}}$$

$$\text{Aut} | {}^3\mathbb{C}_3^{\mathfrak{U}} = {}^3\mathbb{C}_3^{\mathfrak{U}} = SU_3^{\mathbb{C}}$$

$$\text{Aut} | {}^3\mathbb{H}_3^{\mathfrak{U}} = {}^3\mathbb{H}_3^{\mathfrak{U}} = SU_3^{\mathbb{H}}$$

$$\text{Aut} | {}^3\mathbb{O}_3^{\mathfrak{U}} = {}^3\mathbb{O}_3^{\mathfrak{U}} = SU_3^{\mathbb{O}} = F_4$$