$$\mathcal{J}\left(\mathbb{R}^4\right) = \mathbb{P}\left(\mathbb{C}^2\right) = \frac{{}^2\mathbb{C}_2^{\mathrm{U}}}{\mathbb{C}^{\mathrm{U}} \times \mathbb{C}^{\mathrm{U}}}$$

$$\mathrm{Tw}\ (M) = {}^{\mathbb{R}^4} \triangle \underline{M} \underset{M}{\times} \mathcal{J}\left(\mathbb{R}^4\right)$$

Atiyah-Hitchin-Singer $\mathrm{Tw}\ (M)$ komplex $\Leftrightarrow M$ self-dual

Nijenhuis $\mathrm{Tw}\ (M) =$ Weyl_ (M)

$$\mathrm{Tw}\ \left(\mathbb{R}^4\right) = \mathbb{R}^4 \times \mathbb{P}\left(\mathbb{C}^2\right)$$

$$\mathrm{Tw}\ \left(\mathbb{S}_4\right) = {}^4\mathbb{R}_4^{\mathrm{U}} \times \mathbb{P}\left(\mathbb{C}^2\right) = \mathbb{P}\left(\mathbb{C}^3\right) = \frac{{}^3\mathbb{C}_3^{\mathrm{U}}}{{}^2\mathbb{C}_2^{\mathrm{U}} \times \mathbb{C}^{\mathrm{U}}}$$

$$\mathrm{Tw}\ \left(\mathbb{P}\left(\mathbb{C}^3\right)\right) = \mathbb{G}_{1:2}\left(\mathbb{C}^3\right) = \frac{{}^3\mathbb{C}_3^{\mathrm{U}}}{\mathbb{C}^{\mathrm{U}} \times \mathbb{C}^{\mathrm{U}} \times \mathbb{C}^{\mathrm{U}}}$$