

$$\mathbb{S}^3=\mathbb{C}_2^{\mathcal{U}}$$

$$\text{left-inv 1-forms}$$

$${}^y\sigma_1\!:\!{}^y\sigma_2\!:\!{}^y\sigma_3$$

$$r>|\alpha\!:\!w|$$

$$\begin{aligned} {}^{ry}G = & \frac{\widehat{dr}^2}{1-\left(\frac{|\alpha\!:\!w|}{r}\right)^4} + r^2 \left( {}^y\sigma_1^2 + {}^y\sigma_2^2 + {}^y\sigma_3^2 - \left( w_1{}^y\sigma_1 + w_2^2{}^y\sigma_2 + w_3{}^y\sigma_3 \right) \right) \\ & + r^2 \left( w_1{}^y\sigma_1 + w_2^2{}^y\sigma_2 + w_3{}^y\sigma_3 \right) \left( 1 - \left( \frac{|\alpha\!:\!w|}{r} \right)^4 \right) \end{aligned}$$