

$${}^2\mathbb{C}_2 \ni \frac{a}{\bar{b}} \Big| \frac{b}{d} = \frac{1}{2} \left(a + d:a - d:\underbrace{i\bar{b} + \bar{b}}:b - \bar{b} \right) \in \mathbb{C}^4$$

$${}^2\mathbb{C}_2^{\mathfrak{B}} \ni \frac{a}{b} \Big| \frac{b}{d} = \frac{1}{2} \left(a + d:a - d:\underbrace{i\bar{b} + \bar{b}} \right) \in \mathbb{C}^3$$