$$g_{\mathbb{C}} = \begin{array}{c|c} a & b \\ \hline \bar{b} & \bar{a} \end{array} \in {}^{r}_{1|1}\mathbb{C}^{\mho}_{r} \cap {}^{r}_{2}\mathbb{C}^{\Omega}_{r}$$

$$J_{\mathbb{C}} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array}$$

$$k_{\mathbb{C}} = \begin{array}{c|c} a & 0 \\ \hline 0 & \bar{a} \end{array} = \begin{array}{c|c} a & 0 \\ \hline 0 & \overset{+}{a}^{-1} \end{array} \in {}^{r}_{t}\mathbb{C}^{\mho}_{r}$$

$$\overset{*}{g}_{\mathbb{C}} J_{\mathbb{C}} g_{\mathbb{C}} = J_{\mathbb{C}}$$

$$g_{\mathbb{C}}^{-1} = J_{\mathbb{C}} \overset{*}{g}_{\mathbb{C}} J_{\mathbb{C}} = \begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array} \begin{array}{c|c} \overset{*}{a} & \overset{+}{b} \\ \hline \overset{*}{b} & \overset{+}{a} \end{array} \begin{array}{c|c} 1 & 0 \\ \hline 0 & -1 \end{array} = \begin{array}{c|c} \overset{*}{a} & -\overset{+}{b} \\ \hline -\overset{*}{b} & \overset{+}{a} \end{array}$$

$$\gamma_{\mathbb{C}} = \begin{array}{c|c} \alpha & \beta \\ \hline \bar{\beta} & \bar{\alpha} \end{array} \in {}^{r}_{1|1}\mathbb{C}^{\bar{\mho}}_{r} \cap {}^{r}_{2}\mathbb{C}^{\bar{\Omega}}_{r}$$

$$\begin{array}{c|c} 1 & 1 \\ \hline i & -i \end{array} \begin{array}{c|c} a & b \\ \hline \bar{b} & \bar{a} \end{array} \begin{array}{c|c} 1 & -i \\ \hline 1 & i \end{array} = \begin{array}{c|c} a + \bar{a} + b + \bar{b} & i\left(\bar{a} - a + b - \bar{b}\right) \\ \hline i\left(a - \bar{a} + b - \bar{b}\right) & a + \bar{a} - b - \bar{b} \end{array}$$

$$\exp \begin{array}{c|c} 0 & w \\ \hline \overset{*}{w} & 0 \end{array} = \begin{array}{c|c} \cosh\sqrt{w\overset{*}{w}} & \dfrac{\sinh\sqrt{w\overset{*}{w}}}{\sqrt{w\overset{*}{w}}}\, w \\ \hline \overset{*}{w}\, \dfrac{\sinh\sqrt{w\overset{*}{w}}}{\sqrt{w\overset{*}{w}}} & \cosh\sqrt{\overset{*}{w}w} \end{array}$$

$$\left.\begin{array}{c|c} 0 & w \\ \hline \overset{*}{w} & 0 \end{array}\right.^{2n} = \begin{array}{c|c} \overparen{w\overset{*}{w}}^{\,n} & 0 \\ \hline 0 & \overparen{\overset{*}{w}w}^{\,n} \end{array} = \begin{array}{c|c} \sqrt{w\overset{*}{w}}^{\,2n} & 0 \\ \hline 0 & \sqrt{\overset{*}{w}w}^{\,2n} \end{array}$$

$$\left.\begin{array}{c|c} 0 & w \\ \hline \overset{*}{w} & 0 \end{array}\right.^{2n+1} = \begin{array}{c|c} 0 & \overparen{w\overset{*}{w}}^{\,n} w \\ \hline \overparen{\overset{*}{w}w}^{\,n} \overset{*}{w} & 0 \end{array} = \begin{array}{c|c} 0 & \sqrt{w\overset{*}{w}}^{\,2n} w \\ \hline \sqrt{\overset{*}{w}w}^{\,2n} \overset{*}{w} & 0 \end{array}$$

$$\text{LHS} = \sum_{n}^{\mathbb{N}} \frac{1}{(2n)!} \left.\begin{array}{c|c} 0 & w \\ \hline \overset{*}{w} & 0 \end{array}\right.^{2n} + \sum_{n}^{\mathbb{N}} \frac{1}{(2n+1)!} \left.\begin{array}{c|c} 0 & w \\ \hline \overset{*}{w} & 0 \end{array}\right.^{2n+1} = \text{RHS}$$