

$$\frac{a \mid b}{c \mid d} \in {}_{2:2}\mathbb{R}_n^U$$

$$\frac{1-t}{2} = s+n$$

$$\overline{{}^x \frac{a \mid b}{c \mid d} \overset{s}{\star} \gamma} = \overline{{}^{-1} \frac{b+xd}{a+xc} \gamma} \Delta^{1-2n-s} = \overline{{}^{-1} \frac{b+xd}{a+xc} \gamma} \Delta^{(1+t)/2-n}$$

$$\begin{aligned} \gamma \overset{s}{\star} \gamma &= \int_{dz}^{{}^n \mathbb{R}_n^U} z \bar{\gamma} \int_{dw}^{{}^n \mathbb{R}_n^U} w \gamma e^{-z\bar{w}} \Delta^s = \int_{dz}^{{}^n \mathbb{R}_n^U} z \bar{\gamma} \int_{dw}^{{}^n \mathbb{R}_n^U} w \gamma e^{-z\bar{w}} \Delta^{(1-t)/2-n} \\ &= \frac{\Gamma_{\ell_i-s-n+1}}{\Gamma_{\ell_i+s+n}} = \frac{\Gamma_{\ell_i+(t-1)/2+1}}{\Gamma_{\ell_i+(1-t)/2}} = \frac{\Gamma_{\lambda_i+n-i+(1+t)/2}}{\Gamma_{\lambda_i+n-i+(1-t)/2}} \end{aligned}$$