

$${}^p_{\mathcal{U}}\mathbb{C}_q\begin{smallmatrix}\nearrow\\ \infty\end{smallmatrix}\mathbb{C}\overset{\overset{*}{\sigma}}{\longleftarrow\atop\text{alg-hom}}{}^{p;q}\mathbb{C}^{\mathcal{U}}_{p;q}\begin{smallmatrix}\mathcal{U}\\ \searrow\\ \infty\end{smallmatrix}\mathbb{C}$$

$${}^*_\sigma\frac{a}{c}\bigg|\frac{b}{d}=\frac{\overbrace{1+\varepsilon z\tilde{z}^*}^{-1/2}}{-\varepsilon\overbrace{1+\varepsilon\tilde{z}^*z}^{-1/2}}\bigg|\frac{\overbrace{1+\varepsilon z\tilde{z}^*z}^{-1/2}}{\overbrace{1+\varepsilon\tilde{z}^*z}^{-1/2}}$$