

$${}^zZ^{-\nu}_w=\sum_{\mu}^{\mathbb{N}^r}(\nu)_{\mu}{}^zZ^{\mu}_w$$

$${}_zZ_{\wedge}=\left[\begin{matrix} -m:n+m\\ n \end{matrix} \right]\left((1+{}^{-1}zz^*)zz^* \right)=\left[\begin{matrix} -m:n+m\\ n \end{matrix} \right](z^{-z}z^*)=\sum_{\mathbb{N}^r}^{\mu}\frac{(\alpha)_{\mu}(\beta)_{\mu}}{(\gamma)_{\mu}}{}^{z^{-z}}Z^{\mu}_z$$