

$$B \subset B^{\mathbb{C}}$$

$$r_{\mathbb{C}} = 2r: \quad a_{\mathbb{C}} = a/2$$

$$\varkappa_{\mathbb{C}} = \varkappa\varkappa: \quad {}^x\Phi_{\mathbb{C}}^{\varkappa\varkappa} = {}^{x^2}\Phi^{\varkappa}$$

$$\Phi_{\mathbb{C}}^{\varkappa\varkappa} \star \Phi_{\mathbb{C}}^{\varkappa\varkappa} = \frac{(d_X/r)_{\varkappa} (d_Z/2r)_{\varkappa}}{d_X^{\varkappa}}$$

$$\begin{aligned} \frac{\Phi_{\mathbb{C}}^{\varkappa\varkappa} \star \Phi_{\mathbb{C}}^{\varkappa\varkappa}}{\Phi_{\mathbb{C}}^{\varkappa\varkappa} \star \Phi_{\mathbb{C}}^{\varkappa\varkappa}} &= \frac{\Gamma_{\nu + \varkappa\varkappa}^{\mathbb{C}}}{\Gamma_{\nu}^{\mathbb{C}}} = \prod_j \frac{\Gamma_{\nu + \varkappa_j - a_{\mathbb{C}}(2j-2)/2} \Gamma_{\nu + \varkappa_j - a_{\mathbb{C}}(2j-1)/2}}{\Gamma_{\nu - a_{\mathbb{C}}(2j-2)/2} \Gamma_{\nu - a_{\mathbb{C}}(2j-1)/2}} \\ &= \prod_j \frac{\Gamma_{\nu + \varkappa_j - a(j-1)/2} \Gamma_{\nu - a/4 + \varkappa_j - a(j-1)/2}}{\Gamma_{\nu - a(j-1)/2} \Gamma_{\nu - a/4 - a(j-1)/2}} = (\nu)_{\varkappa} (\nu - a/4)_{\varkappa} \end{aligned}$$