

$$\begin{aligned}
\frac{d}{dt} \mathcal{N}^{2-} \phi_{\mathcal{A}ijk} \approx & \frac{\left(\mathcal{D}^{1+} \hat{\pi}_{\mathcal{A}}\right)^{\parallel}_{ijk} \mathcal{N}}{4\mathcal{I}} - \frac{\left(\mathcal{D}^{1+} \hat{\pi}_{\mathcal{A}}\right)^{\parallel}_{jik} \mathcal{N}}{4\mathcal{I}} - \\
& \frac{\left(\mathcal{D}^{1+} \hat{\pi}_{\mathcal{A}}\right)^{\parallel}_{kij} \mathcal{N}}{2\mathcal{I}} - \frac{3\left(\mathcal{D}^{1+} \hat{\pi}_{\mathcal{A}}\right)^{\parallel}_{ja} \eta^{\parallel}_{ik} \mathcal{N}}{8\mathcal{I}} + \frac{3\left(\mathcal{D}^{1+} \hat{\pi}_{\mathcal{A}}\right)^{\parallel}_{ia} \eta^{\parallel}_{jk} \mathcal{N}}{8\mathcal{I}} + \\
& - \frac{2}{3} \mathcal{M}_{\text{Pl}}^2 \hat{\alpha}_0 \mathcal{N}^{2-} \mathcal{T}^{\parallel}_{ijk} + \frac{1}{3} \mathcal{M}_{\text{Pl}}^2 \hat{\alpha}_0 \mathcal{N}^{2-} \mathcal{T}^{\parallel}_{ikj} - \frac{1}{3} \mathcal{M}_{\text{Pl}}^2 \hat{\alpha}_0 \mathcal{N}^{2-} \mathcal{T}^{\parallel}_{jki}
\end{aligned}$$