

$$\begin{aligned}
\chi\Pi\Theta' = & -\mathcal{M}_b(\Theta - \langle\Theta\rangle_1) - \frac{\mathcal{M}_bF_1 + \mathcal{M}_1(\eta\Pi - \mathcal{F}_b)}{\eta\Pi}(\langle\Theta\rangle_1 - \langle\Theta\rangle_2) \\
& + \frac{\chi}{\eta}\mathcal{F}_b(\Theta - \Theta_1) - \frac{\chi}{\eta}\mathcal{F}_1\left(\Theta - \Theta_1 - \frac{\Theta_1 - \Theta_2}{\varkappa_2}\right) \\
& - \frac{\mathcal{M}_b\mathcal{F}_r + (\eta\Pi - F_b)\mathcal{M}_r}{\eta\Pi}\Gamma_\Theta - \frac{\chi}{\eta}\mathcal{F}_r\Gamma'_\Theta + W,
\end{aligned}$$

$$\begin{aligned}
\chi\Pi\Phi' = & -\mathcal{M}_b(\Phi - \langle\Phi\rangle_1) - \frac{\mathcal{M}_bF_1 + \mathcal{M}_1(\eta\Pi - F_b)}{\eta\Pi}(\langle\Phi\rangle_1 - \langle\Phi\rangle_2) \\
& + \frac{\chi}{\eta}\mathcal{F}_b(\Phi - \Phi_1) - \frac{\chi}{\eta}\mathcal{F}_1\left(\Phi - \Phi_1 - \frac{\Phi_1 - \Phi_2}{\varkappa_2}\right) \\
& + \left(\frac{\chi}{\eta}\frac{\mathcal{F}_r\Theta'\cos\Theta}{(\sin\Theta)^2} - \frac{\mathcal{M}_b\mathcal{F}_r + \mathcal{M}_r(\eta\Pi - \mathcal{F}_b)}{\eta\Pi\sin\Theta}\right)\Gamma_\Phi - \frac{\chi}{\eta}\frac{\mathcal{F}_r}{\sin\Theta}\Gamma'_\Phi
\end{aligned}$$