$$L1\left(\frac{1}{\beta}+1\right)f'''-A\left(f'+\frac{\eta}{2}f''\right)+ff''-f'^{2}-L2Mf'-\frac{L1}{Da}\left(\frac{1}{\beta}+1\right)f'=0 \quad (9)$$

$$\theta''\left(1+L3\,\mathrm{Pr}\,Nr\right)+\mathrm{Pr}\,L4\left(f\theta'-f'\theta+A\left(\theta+\frac{\eta}{2}\theta'\right)\right)-\vartheta(f^{2}\theta''+ff'\theta')=0 \quad (10)$$

The corresponding boundary conditions are

$$f(0)=S,\ \ f'(0)=1+\gamma\,L5\,f''(0),\ \theta'(0)=-Bi(1-\theta(0)) \quad (11)$$

$$f'(\eta)\to 0,\theta(\eta)\to 0\ as\ \eta\to\infty$$