Stability Analysis: Giesekus

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1 Equation Coefficients

1.1 A_{11} Equation

1.2 A_{12} Equation

1.3 A_{22} Equation

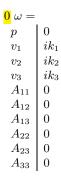
$$\begin{array}{lll} A_{22} \ \omega = & & p & 0 \\ v_1 & -A_{22,x_{10}} & & \\ v_2 & -A_{22,x_{20}} + 2A_{12_0}ik_1 + 2A_{22_0}ik_2 \\ A_{11} & 0 & & \\ A_{12} & 2v_{2,x_{10}} - \alpha(2A_{12_0}) \\ A_{22} & -\frac{(v_{1_0}ik_1 + v_{2_0}ik_2)}{(v_{1_0}ik_1 + v_{2_0}ik_2)} + 2v_{2,x_{20}} - 1 - \alpha(2A_{22_0} - 2) \end{array}$$

1.4 x_1 Momentum Equation

1.5 x_2 Momentum Equation

$$\begin{array}{c|c} El^{-1}v_2 & \omega = \\ p & -ik_2 \\ v_1 & -El^{-1}v_{2,x_{10}} \\ v_2 & -El^{-1}(v_{2,x_{20}} + v_{1_0}ik_1 + v_{2_0}ik_2) - \beta (k_1^2 + k_2^2) \\ A_{11} & 0 \\ A_{12} & ik_1 \\ A_{22} & ik_2 \end{array}$$

1.6 Mass Equation



2 Repeated Terms/Phrases

2.1 Most Helpful

$\begin{aligned} & A_{11_0}ik_1 + A_{12_0}ik_2 \\ & A_{12_0}ik_1 + A_{22_0}ik_2 + \\ & k_1^2 + k_2^2 \end{aligned}$

2.2 Also Helpful

