

1 Example FoxH-generalized_Bessel_Maitland_2_9_24. wls

File content

Fox H-function

$$H_{1,3}^{1,1} \left(\begin{matrix} \cdot \left| \begin{matrix} (\lambda + \frac{\nu}{2}, 1) \\ (\lambda + \frac{\nu}{2}, 1), (\frac{\nu}{2}, 1), (\mu(\lambda + \frac{\nu}{2}) - \lambda - \nu, \mu) \end{matrix} \right. \end{matrix} \right)$$

$$H_{1,3}^{1,1} \left(\begin{matrix} \cdot \left| \begin{matrix} (\lambda + \frac{\nu}{2}, 1) \\ (\lambda + \frac{\nu}{2}, 1) \end{matrix} \right. \middle| \begin{matrix} (\frac{\nu}{2}, 1), (\mu(\lambda + \frac{\nu}{2}) - \lambda - \nu, \mu) \end{matrix} \end{matrix} \right)$$

Summary

$$\begin{aligned} a^* &= 1 - \mu \\ \Delta &= \mu + 1 \\ \delta &= \text{ComplexInfinity} \\ \mu &= \mu \left(\lambda + \frac{\nu}{2} \right) - \lambda - \frac{\nu}{2} - 1 \\ a_1^* &= 1 \\ a_2^* &= -\mu \\ \xi &= -\mu \left(\lambda + \frac{\nu}{2} \right) + 3\lambda + \frac{3\nu}{2} \\ c^* &= 0 \end{aligned}$$

Poles 1. First eight poles from upper front list

$$a_{i,k} = \begin{pmatrix} -\lambda - \frac{\nu}{2} + 1 \\ -\lambda - \frac{\nu}{2} + 2 \\ -\lambda - \frac{\nu}{2} + 3 \\ -\lambda - \frac{\nu}{2} + 4 \\ -\lambda - \frac{\nu}{2} + 5 \\ -\lambda - \frac{\nu}{2} + 6 \\ -\lambda - \frac{\nu}{2} + 7 \\ -\lambda - \frac{\nu}{2} + 8 \end{pmatrix}^T$$

2. First eight poles from lower front list

$$b_{j,\ell} = \begin{pmatrix} -\lambda - \frac{\nu}{2} \\ -\lambda - \frac{\nu}{2} - 1 \\ -\lambda - \frac{\nu}{2} - 2 \\ -\lambda - \frac{\nu}{2} - 3 \\ -\lambda - \frac{\nu}{2} - 4 \\ -\lambda - \frac{\nu}{2} - 5 \\ -\lambda - \frac{\nu}{2} - 6 \\ -\lambda - \frac{\nu}{2} - 7 \end{pmatrix}^T$$