# 1 Example `FoxH32-21.wls`

**File content**

**Fox H-function**

$$H_{2,3}^{2,1}\left(\cdot\left|\begin{array}{l}\left(1,\frac{1}{\alpha}\right),(\lceil\beta\rceil,\beta)\\ \\ \left(\frac{1}{2},\frac{\alpha}{2}\right),(1,1),\left(1,\frac{\alpha}{2}\right)\end{array}\right.\right)$$

$$H_{2,3}^{2,1}\left(\cdot\left|\begin{array}{c|c}\left(1,\frac{1}{\alpha}\right) & (\lceil\beta\rceil,\beta)\\ \hline \left(\frac{1}{2},\frac{\alpha}{2}\right),(1,1) & \left(1,\frac{\alpha}{2}\right)\end{array}\right.\right)$$

**Summary**

$$\begin{aligned}a^* &= \frac{1}{\alpha}-\beta+1\\ \Delta &= \alpha-\frac{1}{\alpha}-\beta+1\\ \delta &= 2^{-\alpha}\left(\frac{1}{\alpha}\right)^{-1/\alpha}\left(2^{\alpha/2}\alpha^{\alpha/2}+\alpha^{\alpha}\right)\beta^{-\beta}\\ \mu &= 1-\lceil\beta\rceil\\ a_1^* &= \frac{1}{2}(\alpha-2\beta+2)\\ a_2^* &= \frac{1}{\alpha}-\frac{\alpha}{2}\\ \xi &= \frac{3}{2}-\lceil\beta\rceil\\ c^* &= \frac{1}{2}\end{aligned}$$

**Poles 1. First eight poles from upper front list**

$$a_{i,k}=\left(\begin{array}{cccccccc}0 & \alpha & 2\alpha & 3\alpha & 4\alpha & 5\alpha & 6\alpha & 7\alpha\end{array}\right)$$

**2. First eight poles from lower front list**

$$b_{j,\ell} = \begin{pmatrix} -\frac{1}{\alpha} & -\frac{3}{\alpha} & -\frac{5}{\alpha} & -\frac{7}{\alpha} & -\frac{9}{\alpha} & -\frac{11}{\alpha} & -\frac{13}{\alpha} & -\frac{15}{\alpha} \\ -1 & -2 & -3 & -4 & -5 & -6 & -7 & -8 \end{pmatrix}$$