1 Example **FoxH32-21.wls**

File content

```
{
  (* Upper List *) {
    (* Upper Front List *) {{1, α^(-1)}},
    (* Upper Rear List *)  {{Ceiling[β], β}}
  },
  (* Lower List *) {
    (* Lower Front List *) {{1/2, α/2}, {1, 1}},
    (* Lower Rear List *)  {{1, α/2}}
  }
}
```

Fox H-function

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

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

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 ten poles from upper front list

$$
a_{i,k} = \begin{pmatrix} 0 & \alpha & 2\alpha & 3\alpha & 4\alpha & 5\alpha & 6\alpha & 7\alpha & 8\alpha & 9\alpha & 10\alpha \end{pmatrix}
$$

2. First ten poles from lower front list

$$
b_{j,\ell} = \begin{pmatrix} -\frac{1}{\alpha} & -\frac{3}{\alpha} & -\frac{5}{\alpha} & -\frac{7}{\alpha} & -\frac{9}{\alpha} & -\frac{11}{\alpha} & -\frac{13}{\alpha} & -\frac{15}{\alpha} & -\frac{17}{\alpha} & -\frac{19}{\alpha} & -\frac{21}{\alpha} \\ -1 & -2 & -3 & -4 & -5 & -6 & -7 & -8 & -9 & -10 & -11 \end{pmatrix}
$$