1 Example `test.wls`

File content

```
{
  (* Upper List *) {
    (* Upper Front list *) {{1, \[Alpha]^(-1)}, {1, 1}},
    (* Upper Rear List *)  {{Ceil[\[Beta]], \[Beta]}, {1, 1}}
  },
  (* Lower List *) {
    (* Lower Front List *) {{1/2, \[Alpha]/2}, {1, 1}, {3, 3}, {2, 2}},
    (* Lower Rear List *)  {{1, \[Alpha]/2}}
  }
}
```

Fox H-function

$$H_{4,5}^{4,2}\left(\cdot\,\middle|\,\begin{matrix}\left(1,\frac{1}{\alpha}\right),(1,1),(\mathrm{Ceil}(\beta),\beta),(1,1)\\ \left(\frac{1}{2},\frac{\alpha}{2}\right),(1,1),(3,3),(2,2),\left(1,\frac{\alpha}{2}\right)\end{matrix}\right)$$

$$H_{4,5}^{4,2}\left(\cdot\,\middle|\,\begin{array}{c|c}\left(1,\frac{1}{\alpha}\right),(1,1) & (\mathrm{Ceil}(\beta),\beta),(1,1)\\ \hline \left(\frac{1}{2},\frac{\alpha}{2}\right),(1,1),(3,3),(2,2) & \left(1,\frac{\alpha}{2}\right)\end{array}\right)$$

Summary

$$\begin{aligned}
a^* &= \frac{1}{\alpha}-\beta+6\\
\Delta &= \alpha-\frac{1}{\alpha}-\beta+4\\
\delta &= \frac{2^{-\alpha}\left(2^{\frac{\alpha}{2}+5}\alpha^{\alpha/2}+\alpha^{\alpha}\right)}{\left(\left(\frac{1}{\alpha}\right)^{\frac{1}{\alpha}}+1\right)(\beta^{\beta}+1)}\\
\mu &= 4-\mathrm{Ceil}(\beta)\\
a_1^* &= \frac{\alpha}{2}-\beta+5\\
a_2^* &= -\frac{\alpha}{2}+\frac{1}{\alpha}+1\\
\xi &= \frac{13}{2}-\mathrm{Ceil}(\beta)\\
c^* &= \frac{3}{2}
\end{aligned}$$

Poles 1. First ten poles from upper front list

$$a_{i,k}=\begin{pmatrix}0 & 0\\ \alpha & 1\\ 2\alpha & 2\\ 3\alpha & 3\\ 4\alpha & 4\\ 5\alpha & 5\\ 6\alpha & 6\\ 7\alpha & 7\\ 8\alpha & 8\\ 9\alpha & 9\\ 10\alpha & 10\end{pmatrix}$$

2. First ten poles from lower front list

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