

1 Example FoxH-Bessel-Y_2_9_20.wls

File content

```
(* (2.9.20) of Kilbas and Saigo 04 *)
{
  (* Upper List *) {
    (* Upper Front List *) {},
    (* Upper Rear List *) {{(a-η-1)/2, 1}}
  },
  (* Lower List *) {
    (* Lower Front List *) {{(a-η)/2, 1},{(a+η)/2, 1}},
    (* Lower Rear List *) {{(a-η-1)/2, 1}}
  }
}
```

Fox H-function

$$H_{1,3}^{2,0} \left(. \left| \begin{array}{c} (\frac{1}{2}(a-\eta-1), 1) \\ (\frac{a-\eta}{2}, 1), (\frac{a+\eta}{2}, 1), (\frac{1}{2}(a-\eta-1), 1) \end{array} \right. \right)$$

$$H_{1,3}^{2,0} \left(. \left| \frac{}{(\frac{a-\eta}{2}, 1), (\frac{a+\eta}{2}, 1)} \right| \frac{(\frac{1}{2}(a-\eta-1), 1)}{(\frac{1}{2}(a-\eta-1), 1)} \right)$$

Summary

$$\begin{aligned} a^* &= 0 \\ \Delta &= 2 \\ \delta &= \text{ComplexInfinity} \\ \mu &= a - 1 \\ a_1^* &= 1 \\ a_2^* &= -1 \\ \xi &= \eta + 1 \\ c^* &= 0 \end{aligned}$$

Poles 1. First eight poles from upper front list

$$a_{i,k} = \{\}^T$$

2. First eight poles from lower front list

$$b_{j,\ell} = \begin{pmatrix} \frac{\eta-a}{2} & \frac{1}{2}(-a-\eta) \\ \frac{1}{2}(-a+\eta-2) & \frac{1}{2}(-a-\eta-2) \\ \frac{1}{2}(-a+\eta-4) & \frac{1}{2}(-a-\eta-4) \\ \frac{1}{2}(-a+\eta-6) & \frac{1}{2}(-a-\eta-6) \\ \frac{1}{2}(-a+\eta-8) & \frac{1}{2}(-a-\eta-8) \\ \frac{1}{2}(-a+\eta-10) & -\frac{a}{2}-\frac{\eta}{2}-5 \\ \frac{1}{2}(-a+\eta-12) & -\frac{a}{2}-\frac{\eta}{2}-6 \\ \frac{1}{2}(-a+\eta-14) & -\frac{a}{2}-\frac{\eta}{2}-7 \end{pmatrix}^T$$