# 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

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

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

### Summary

$$a^* = 0$$

$$\Delta = 2$$

$$\delta = \text{ComplexInfinity}$$

$$\mu = a - 1$$

$$a_1^* = 1$$

$$a_2^* = -1$$

$$\xi = \eta + 1$$

$$c^* = 0$$

### Poles 1. First ten poles from upper front list

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

## 2. First ten poles from lower front list

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