

1 Example FoxH-2_9_4.wls

File content

```
(* (2.9.4) of Kilbas and Saigo 04 *)
{
  (* Upper List *) {
    (* Upper Front List *) {},
    (* Upper Rear List *) {}
  },
  (* Lower List *) {
    (* Lower Front List *) {{b, β}},
    (* Lower Rear List *) {}
  }
}
```

Fox H-function

$$H_{0,1}^{1,0} \left(\begin{matrix} \cdot \\ (b, \beta) \end{matrix} \right)$$

$$H_{0,1}^{1,0} \left(\begin{matrix} \cdot \\ (b, \beta) \end{matrix} \right)$$

Summary

$$\begin{aligned}
 a^* &= \beta \\
 \Delta &= \beta \\
 \delta &= \text{Indeterminate} \\
 \mu &= b - \frac{1}{2} \\
 a_1^* &= \beta \\
 a_2^* &= 0 \\
 \xi &= b \\
 c^* &= \frac{1}{2}
 \end{aligned}$$

Poles 1. First ten poles from upper front list

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

2. First ten poles from lower front list

$$b_{j,\ell} = \left(\begin{array}{cccccccccccc} -\frac{b}{\beta} & -\frac{b+1}{\beta} & -\frac{b+2}{\beta} & -\frac{b+3}{\beta} & -\frac{b+4}{\beta} & -\frac{b+5}{\beta} & -\frac{b+6}{\beta} & -\frac{b+7}{\beta} & -\frac{b+8}{\beta} & -\frac{b+9}{\beta} & -\frac{b+10}{\beta} \end{array} \right)$$

Source This example is from (2.9.4) of [KS04]:

$$H_{0,1}^{1,0} \left(z \left| \begin{array}{c} \\ (b, \beta) \end{array} \right. \right) = \frac{1}{\beta} z^{b/\beta} \exp \left(-z^{1/\beta} \right).$$

References

- [KS04] Anatoly A. Kilbas and Megumi Saigo. *H-transforms*. Vol. 9. Analytical Methods and Special Functions. Theory and applications. Chapman & Hall/CRC, Boca Raton, FL, 2004, pp. xii+389. ISBN: 0-415-29916-0. DOI: 10.1201/9780203487372. URL: <https://doi.org/10.1201/9780203487372>.