The following tree was considered in:

Н. М. Адрианов, А. К. Звонкин
Взвешенные деревья с примитивными группами вращений рёбер
Фундамент. и прикл. матем., 18:6 (2013), 5–50
http://mi.mathnet.ru/eng/fpm1551

Translated as:
N. Adrianov and A. Zvonkin
Weighted trees with primitive edge rotation groups
Journal of Mathematical Sciences, Vol. 209, No. 2, 2015
http://dx.doi.org/10.1007/s10958-015-2494-2

In this paper this tree is a part of the orbit numbered 12.8 having the size 2 (the other three is just the mirror image).

The edge rotation group of this tree is Mathieu group M_{12}.

Consider the following polynomials :

$P_0 = -1\,468\,345\,539\,509\,038\,179 - 40\,019\,310\,262\,264\,212\, i \sqrt{11}$

$P_1 = -400\,285\,387\,498\,467\,960 - 57\,585\,137\,076\,343\,800\, i \sqrt{11}$

$P_2 = -37\,301\,312\,488\,656\,546 - 11\,533\,512\,675\,651\,516\, i \sqrt{11}$

$P_3 = -1\,281\,075\,422\,091\,520 - 877\,785\,440\,143\,040\, i \sqrt{11}$

$P_4 = 779\,674\,678\,695 - 26\,721\,455\,646\,600\, i \sqrt{11}$

$P_5 = 955\,674\,179\,856 - 75\,062\,137\,392\, i \sqrt{11}$

$P_6 = 27\,830\,051\,700 + 13\,001\,827\,080\, i \sqrt{11}$

$P_7 = 628\,892\,352 + 300\,009\,600\, i \sqrt{11}$

$P_8 = -1\,003\,365 + 1\,316\,700\, i \sqrt{11}$

$P_9 = -315\,480 - 72\,600\, i \sqrt{11}$

$P_{10} = -3762 - 396\, i \sqrt{11}$

$P_{11} = 0$

$P_{12} = 1$

$$A(z) = \sum_{k=0}^{12} P_k z^k ;$$

$$B(z) = z + 33$$

A[z]/B[z] is a Belyi function corresponding to the following tree with weighted edges