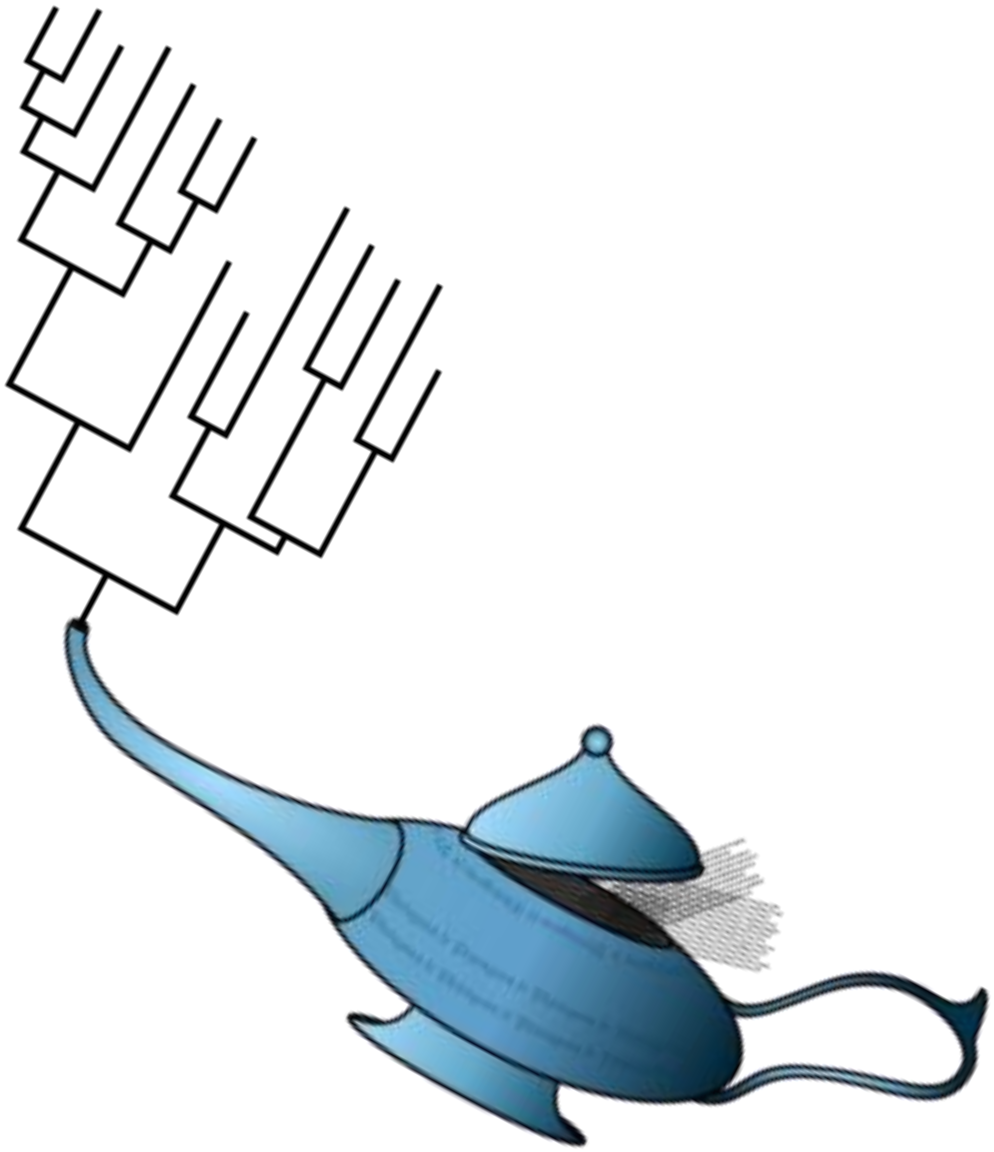
Building phylogenetic tree

Summer School:

„from fungal morphology to genotype”



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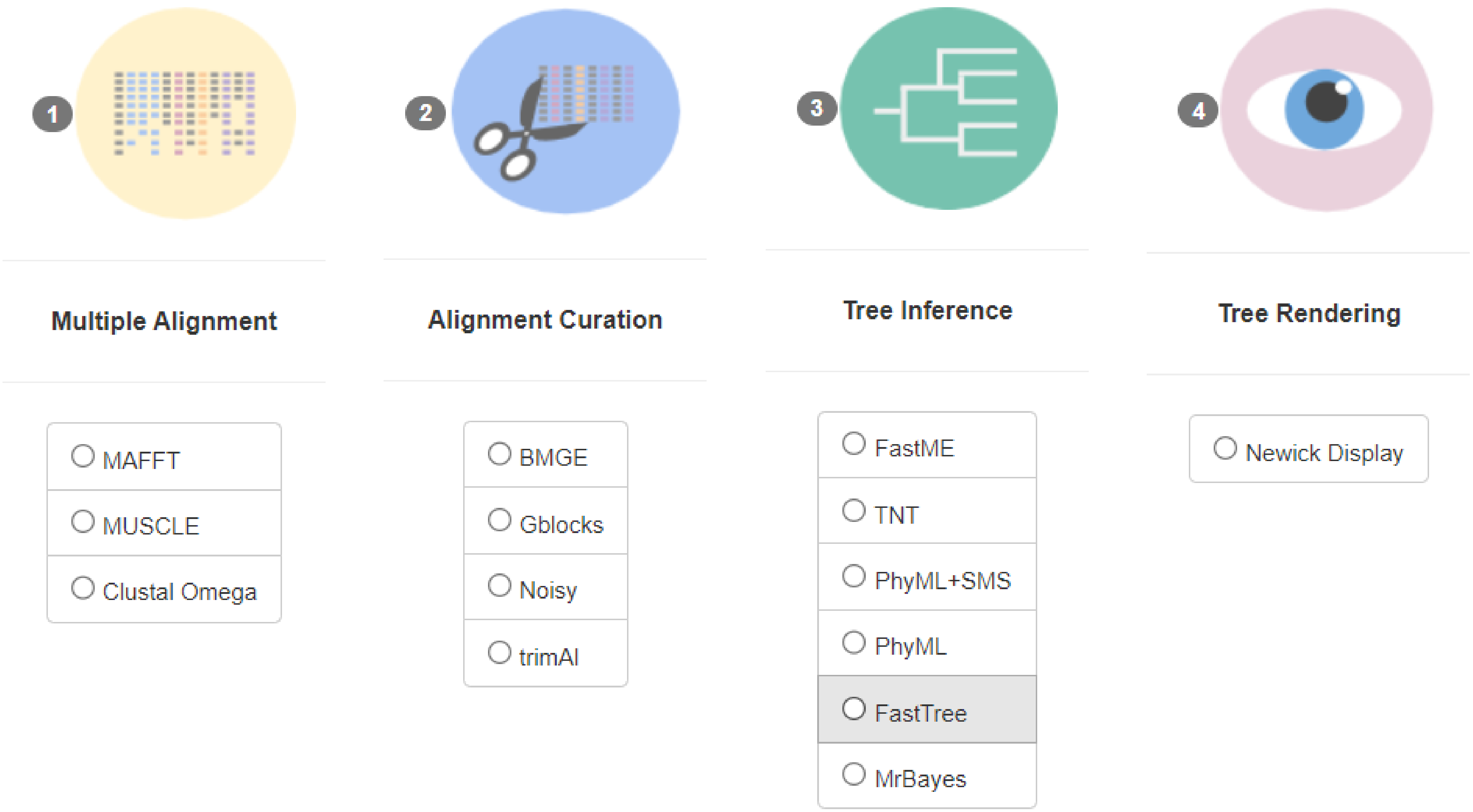
30.08.2024

General pipeline



Automatic tool: https://ngphylogeny.fr/

Robust phylogenetic analysis for everyone.

Free, simple to use web service dedicated to reconstructing and analysing phylogenetic relationships between molecular sequences.

› One Click

Fully automatic workflow

Default tools + **default** parameters.

› Advanced

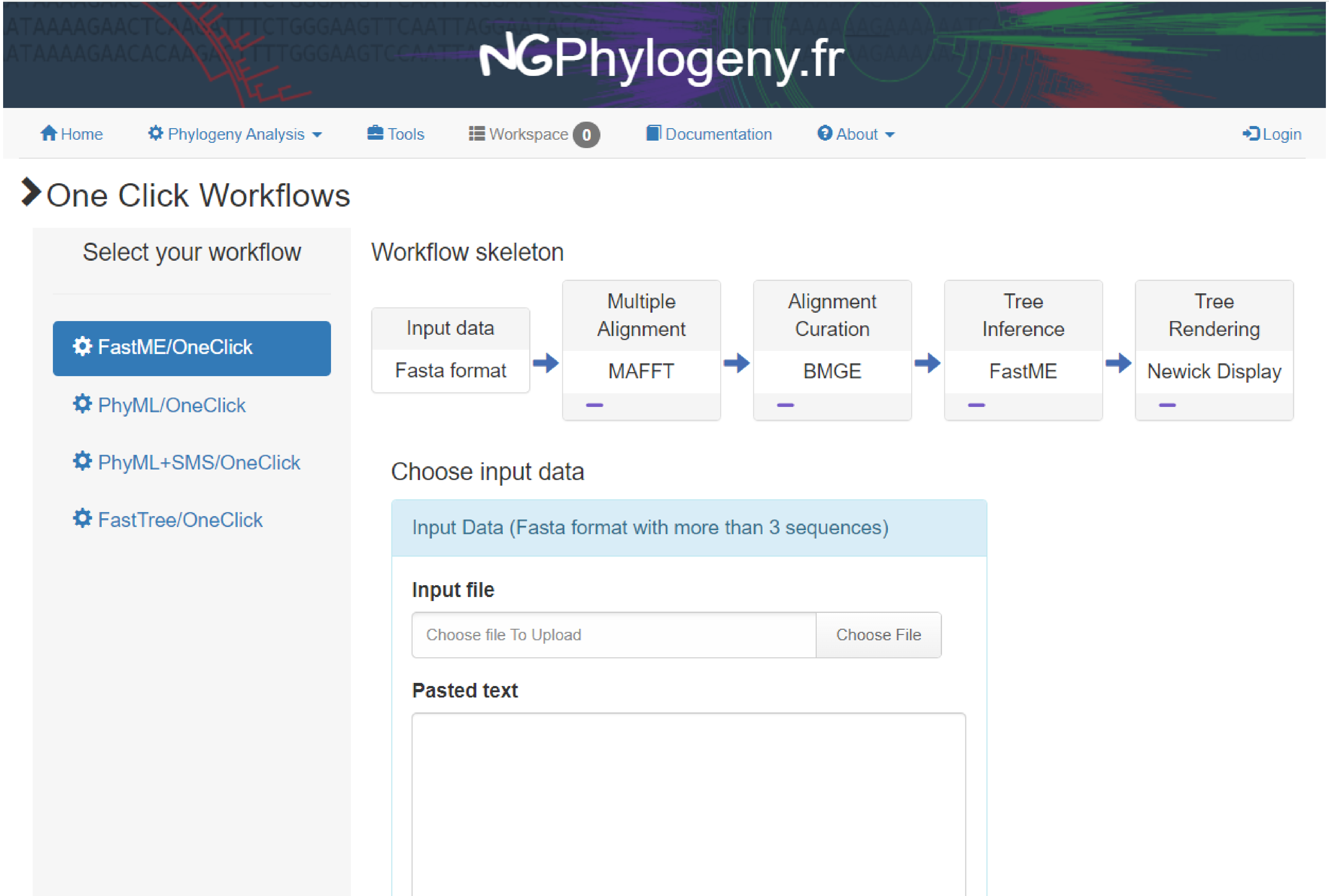
Semi automatic workflow

Default tools + **custom** parameters

› A la Carte

Custom workflow

Custom tools + **Custom** parameters.



One Click Workflows

Select your workflow

Workflow skeleton

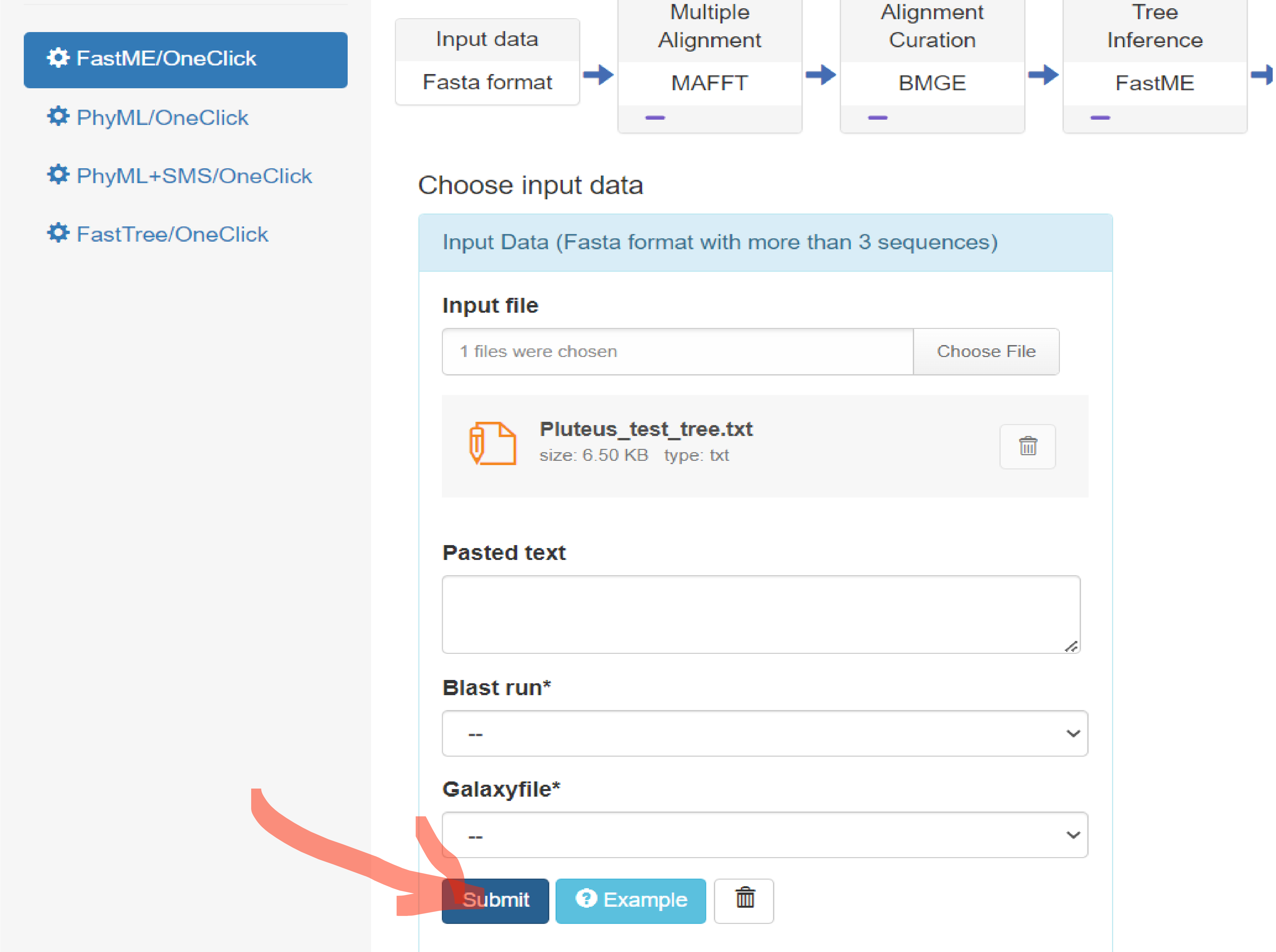
Input data	Multiple Alignment	Alignment Curation	Tree Inference	Tree Rendering
Fasta format	MAFFT	BMGE	FastME	Newick Display

Choose input data

Input Data (Fasta format with more than 3 sequences)

Input file

Pasted text



Input data: Fasta format → Multiple Alignment: MAFFT → Alignment Curation: BMGE → Tree Inference: FastME →

Choose input data

Input Data (Fasta format with more than 3 sequences)

Input file

1 files were chosen

Pluteus_test_tree.txt
size: 6.50 KB type: txt

Pasted text

Blast run*

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Galaxyfile*

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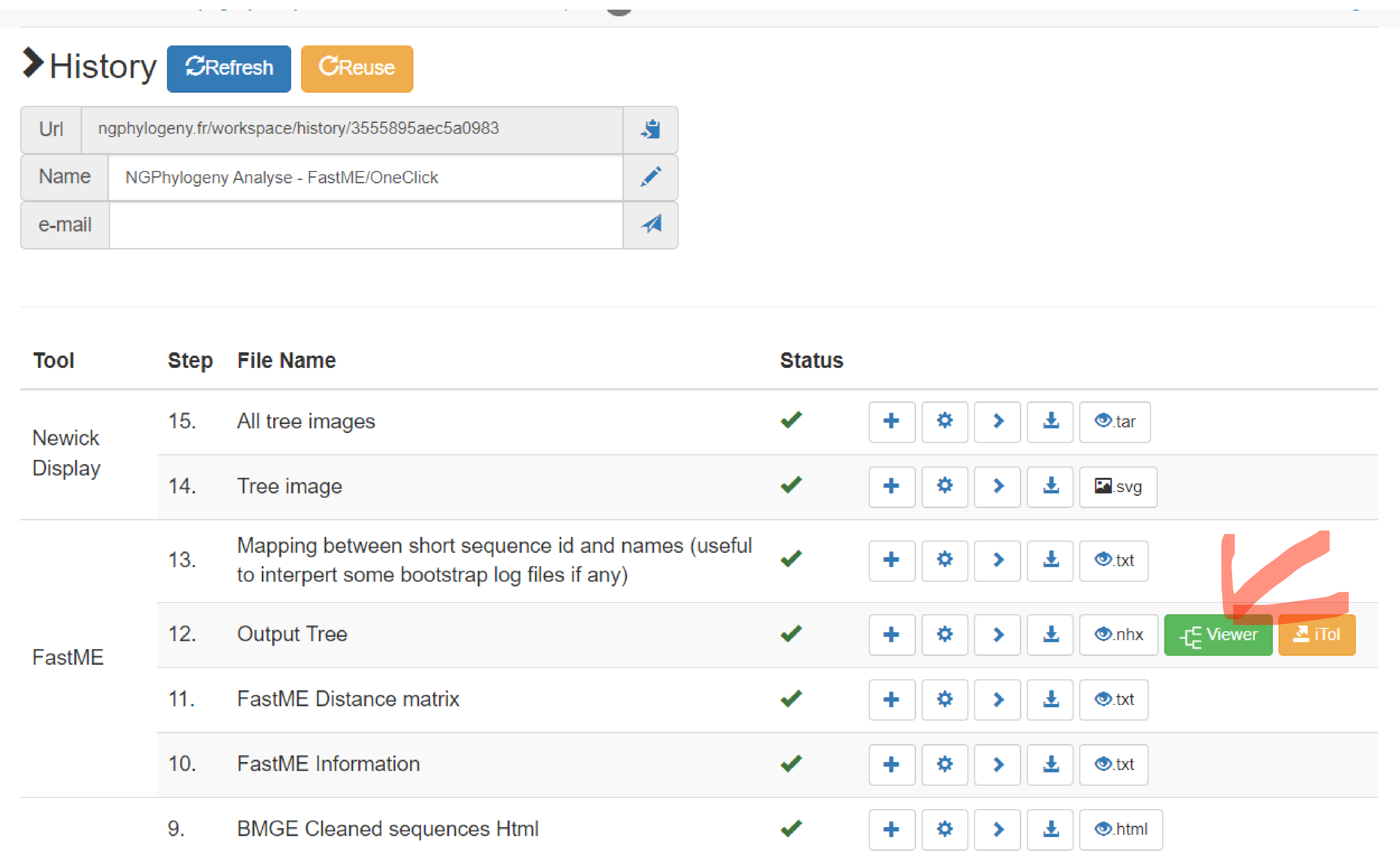
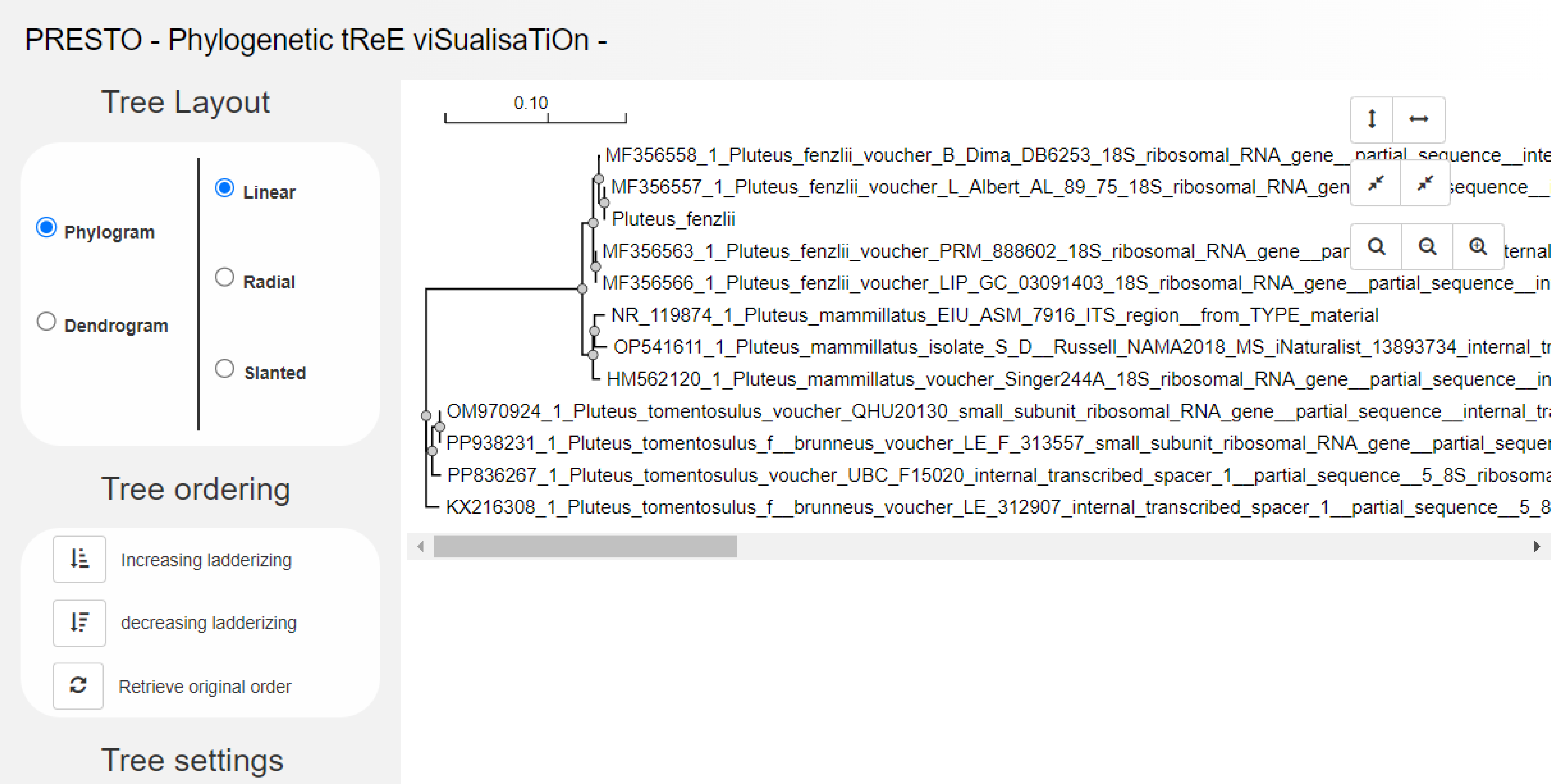


Url ngphylogeny.fr/workspace/history/3555895aec5a0983

Name NGPhylogeny Analyse - FastME/OneClick

e-mail

Tool	Step	File Name	Status	
Newick Display	15.	All tree images	✓	.tar
	14.	Tree image	✓	.svg
FastME	13.	Mapping between short sequence id and names (useful to interpert some bootstrap log files if any)	✓	.txt
	12.	Output Tree	✓	.nhx Viewer iTol
	11.	FastME Distance matrix	✓	.txt
	10.	FastME Information	✓	.txt
	9.	BMGE Cleaned sequences Html	✓	.html



PRESTO - Phylogenetic tReE viSualisaTiOn -

Tree Layout

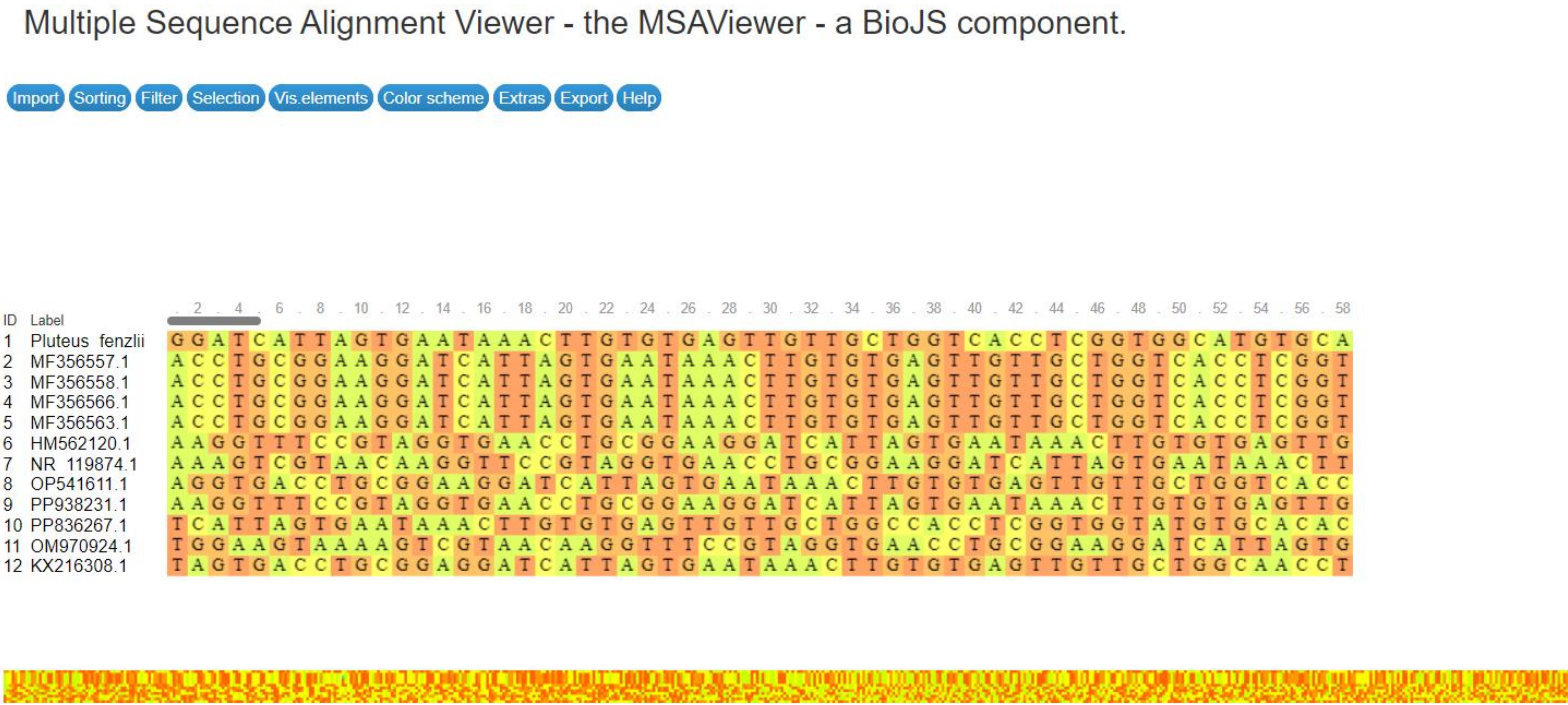
● Phylogram
○ Dendrogram

● Linear
○ Radial
○ Slanted

Tree ordering

Increasing ladderizing
decreasing ladderizing
Retrieve original order

Tree settings



Multiple Sequence Alignment Viewer - the MSAViewer - a BioJS component.

ID	Label	. 2 . 4 . 6 . 8 . 10 . 12 . 14 . 16 . 18 . 20 . 22 . 24 . 26 . 28 . 30 . 32 . 34 . 36 . 38 . 40 . 42 . 44 . 46 . 48 . 50 . 52 . 54 . 56 . 58
1	Pluteus fenzlii	GGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACCTCGGTGGCATGTGCA
2	MF356557.1	ACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACCTCGGT
3	MF356558.1	ACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACCTCGGT
4	MF356566.1	ACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACCTCGGT
5	MF356563.1	ACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACCTCGGT
6	HM562120.1	AAGGTTTCCGTAGGTGAACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTG
7	NR 119874.1	AAAGTCGTAACAAGGTTCCGTAGGTGAACCTGCGGAAGGATCATTAGTGAATAAACTT
8	OP541611.1	AGGTGACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGTCACC
9	PP938231.1	AAGGTTTCCGTAGGTGAACCTGCGGAAGGATCATTAGTGAATAAACTTGTGTGAGTTG
10	PP836267.1	TCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGCCACCTCGGTGGTATGTGCACAC
11	OM970924.1	TGGAAGTAAAAGTCGTAACAAGGTTTCCGTAGGTGAACCTGCGGAAGGATCATTAGTG
12	KX216308.1	TAGTGACCTGCGGAGGATCATTAGTGAATAAACTTGTGTGAGTTGTTGCTGGCAACCT