# Radial

#### Version 1.0.1, by Giorgio Bianchini

**Description**: Computes the coordinates for a radial tree.

Module type: Coordinate

**Module ID**: 95b61284-b870-48b9-b51c-3276f7d89df1

This module computes coordinates for the nodes of the tree in a "radial" style. The root node of the tree is placed at the center of the tree, and branches expand from it in a way that makes sure they do not intersect with

each other.

For the default value of the parameters below, let n be the number of taxa (i.e. leaves) in the tree.

### **Parameters**

#### Width

Control type: Number spin box

**Default value:**  $14 \cdot n$ 

Range:  $[0, +\infty)$ 

This parameter determines the width of the area covered by the tree.

#### Height

Control type: Number spin box

**Default value:** 14  $\cdot n$ 

Range:  $[0, +\infty)$ 

This parameter determines the height of the area covered by the tree.

#### Start angle

Control type: Slider

Default value: 0°

**Range**: [0°, 360°]

This parameter determines the angle for the first split in the tree. Changing it has the effect

of rotating the tree.

#### Sweep angle

Control type: Slider

Default value: 360°

Range: [ 1°, 360° ]

This parameter determines the angular size of the tree.

### **Apply**

Control type: Button

This button applies changes to the other parameter values and signals that the tree needs to be redrawn.

## Further information

This code is based on the algorithm used by <u>FigTree</u>, which is available under a GPLv2 licence here.

Here is an example of a tree drawn using circular coordinates (and with the appropriate shape for the *Branches*):

