NAME

function_plotter.lua − function plotter for Lua-AKFAvatar

SYNOPSIS

function_plotter.lua [*function***]**

DESCRIPTION

Function plotter for Lua-AKFAvatar. You can enter a function for the variable *x*, which will then be plotted. For example, enter something like this: "(x/5)^3"

You can use the following operators:

+ plus (addition)

- minus (substraction)

* multiply (multiplication)

/ divide (division)

^ exponentation (for example use "x^3" for xÂ³)

% modulo (the rest of a division)

For fractions you can use either a point or a comma as decimal mark. So "0.5" or "0,5" is the same. You cannot use a thousands separator. The number π can be written as "pi".

You can use the following functions:

sqrt(*x***)** square root ($\sqrt{x}$)

exp(*x***)** e^*x*

log(*x***)** natural logarithm

log10(*x***)** base-10 logarithm

deg(*x***)** convert to degree (*x* in radians)

rad(*x***)** covert to radians (*x* in degree)

sin(*x***)** sine (*x* in radians)

sinh(*x***)** hyperbolic sine (*x* in radians)

asin(*x***)** arc sine (*x* in radians)

cos(*x***)** cosine (*x* in radians)

cosh(*x***)** hyperbolic cosine (*x* in radians)

acos(*x***)** arc cosine (*x* in radians)

tan(*x***)** tangent (*x* in radians)

tanh(*x***)** hyperbolic tangent (*x* in radians)

atan(*x***)** arc tangent (*x* in radians)

ATTENTION: The argument for these functions must always be put in parentheses!

If you often need special functions or constant, it’s easy to add them to the script.