

Cyberharmonograph

Herbert Breunung

Wer bin ich ?

- Programmierer, Student, Autor
- Softwaretechnik, Musik, Graphik
- auch Sprachen (Perl)
 - Software (Projekte)
 - Module (CPAN)
 - Artikel (heise, perlmag), Dokumentation
 - Sprecher auf Konferenzen (lichtkind.de/vortrag)

Lichtkind auf CPAN

The Perl Toolchain Summit 2025 Needs You: You can help 🙌 [Learn more](#)



LICHTKIND

Herbert Breunung

✉ lichtkind@cpan.org

🌐 kephra.sourceforge.net



ACTIVITY



24 month

All Releases

TOOLS

CPANTesters Reports 📄

CPANTS

Module permissions

MetaCPAN Explorer

11 distributions uploaded by Herbert Breunung (LICHTKIND)



All Releases by Herbert Breunung

◆ Release	◆	Uploaded ▼
App-GUI-Juliagraph-0.7	drawing Mandelbrot and Julia fractals with compl...	4 days ago
App-GUI-Cellgraph-0.81	draw pattern by cellular automata	Apr 15, 2025
App-GUI-Harmonograph-1.0	drawing by lateral and rotary pendula	Apr 08, 2025
Kephra-0.406	compact, effective and inventive coding editor	Dec 11, 2023
Graphics-Toolkit-Color-1.71	color palette constructor	Sep 21, 2023
Chart-v2.403.9	a series of charting modules	Nov 28, 2022
Alien-Font-Uni-0.3	access to Unifont truetype file	Nov 18, 2022
Tie-Wx-Widget-1.01	implicit access value of a Wx widget	Nov 18, 2022

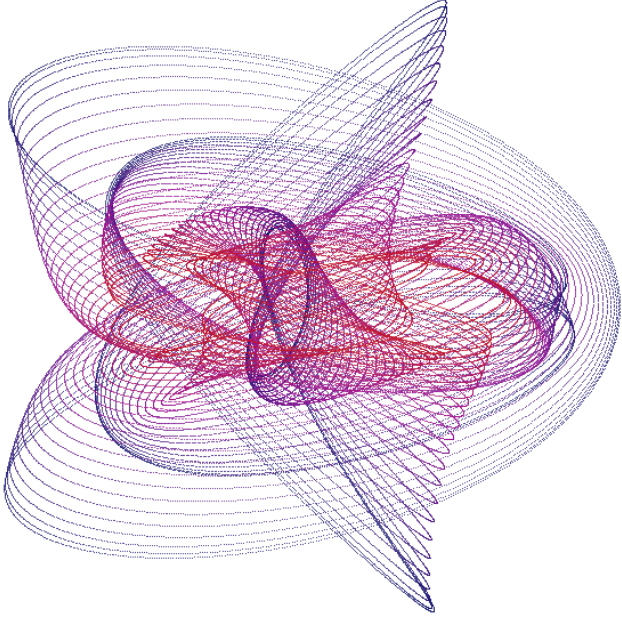
Lichtkind in Berlin



Harmonograph

Harmonograph 0.58

Settings Image Help



done complete drawing

all settings are set to default

Lateral Pendulum Settings | Rotary Pendulum Settings | Modulation Matrix | **Pen Settings**

Line Length 24 - +

Density 26 - + Thickness 1 - +

Color Change linear Step Size 2 - +

Dynamics 1 Dir. Period 10 - +

Start Color

R 20 - + H 240 - +
G 20 - + S 69 - +
B 110 - + L 25 - +

End Color

R 198 - + H 2 - +
G 25 - + S 82 - +
B 20 - + L 43 - +

Image: Draw

Series: Dir ~ good 0 INI Save

Start Color IO airblue < > Load Del Save

End Color IO airblue < > Load Del Save

Habe 3 Programme

- Mathematik zum anfassen
- Verstehen durch Interaktion !
- eigener Ästhetik nachgehen
- persönliche Kunst !

Habe 3 Programme

- GPL => freie Software
- WxWidgets => plattformunabhängig
- Perl => einfach zu verändern
- CPAN => jederzeit installierbar

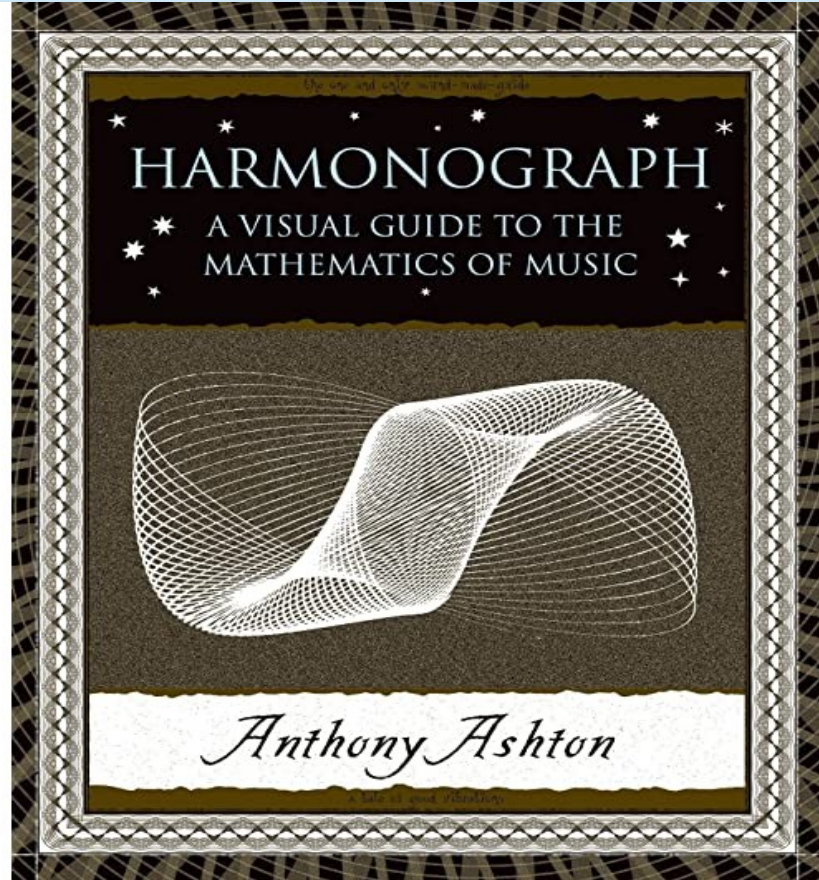
Stelle 3 eigene Programme vor

- Wx => Knöpfe und Fenster
- Kern => Mathematik
- Ausgabe => Graphik (PNG, JPG, SVG)
- Dazwischen: Platz zum Spielen !

Habe 3 Programme

- App::GUI::Cellgraph
- App::GUI::Juliagraph
- App::GUI::Harmonograph

Harmonograph



Harmonograph

Linearl Pendulum

Epi Pendulum

Rotary Pendulum

Functions

Visuals

Colors

- 2+2+2 Pendel
- Trig.Funktionen
- Länge, Stifte, Farbgebung

Harmonograph

The screenshot displays the Harmonograph 1.02 application window. The main canvas shows a blue circle. The interface includes a menu bar (Settings, Image, Help), a pen color selection tool, and a series input field. The right-hand side features a control panel with tabs for Linear Pendulum, Epi Pendulum, Rotary Pendulum, Functions, Visuals, and Colors. The Linear Pendulum section is active, showing settings for X and Y axes. The Y-axis section is also visible, mirroring the X-axis settings.

Harmonograph 1.02

Settings Image Help

Pen Color: Draw

Series: Dir ~ good 0 INI Save

done sketching a preview

no file loaded

Linear Pendulum Epi Pendulum Rotary Pendulum Functions Visuals Colors

X Frequency - + ▾

Precise - + Inv. Dir.

Damp - + * ▾ Neg.

Acceleration - + * ▾

Offset - + 90 180

Radius % - + ▾

Damp - + * ▾ Neg.

Acceleration - + * ▾

Y Frequency - + ▾

Precise - + Inv. Dir.

Damp - + * ▾ Neg.

Acceleration - + * ▾

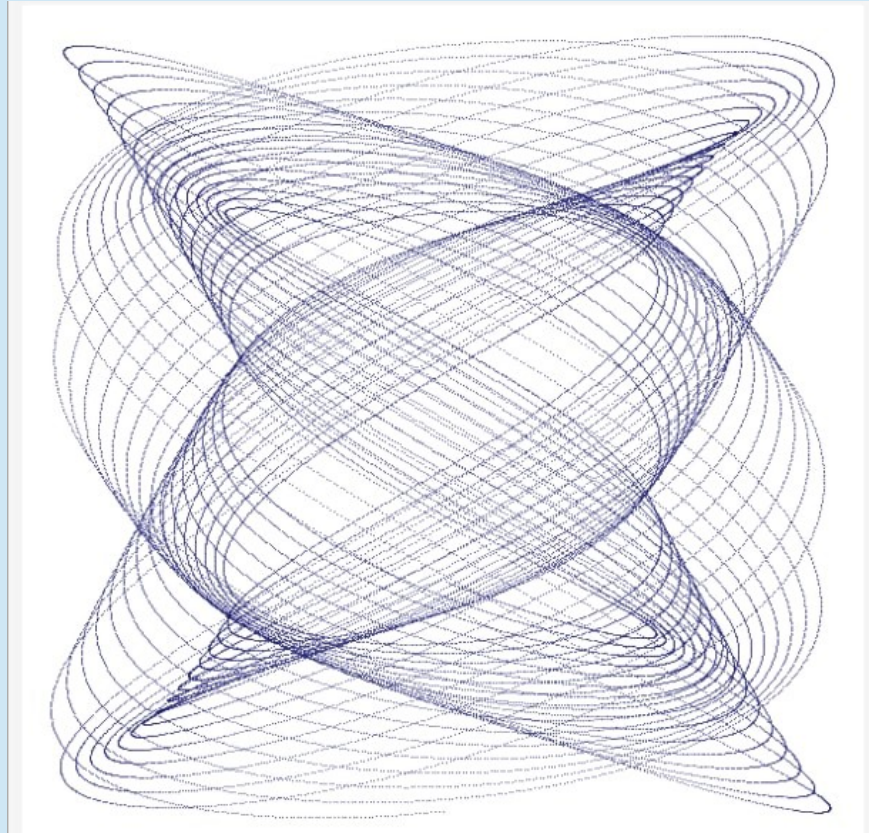
Offset - + 90 180

Radius % - + ▾

Damp - + * ▾ Neg.

Acceleration - + * ▾

Harmonograph



Harmonograph

Harmonograph 0.50

Settings Image Help

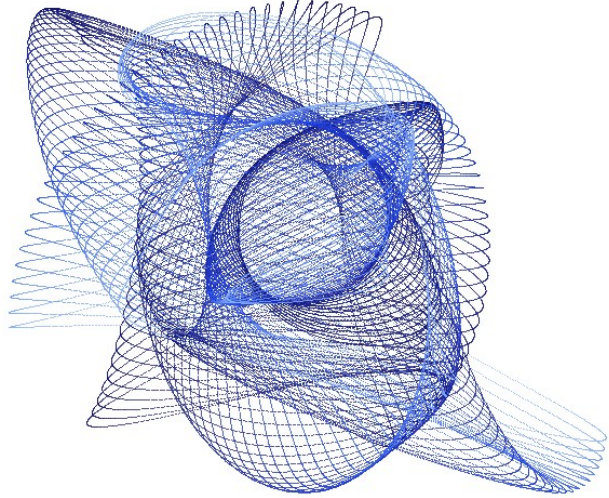





Image:  Draw


Series: Dir wirbel 5 Save INI


done complete drawing

Pendulum Settings Pen Settings



Length 35 - +  Density 73 - + 



Thickness 1 Px



Color Change linear Step Size 1 - + 

Dynamics 2 Dir. Period 10 - + 



Start Color



R 20 - +  H 240 - + 



G 20 - +  S 69 - + 


B 110 - +  L 25 - + 


End Color

R 155 - +  H 217 - + 

G 191 - +  S 87 - + 

B 248 - +  L 79 - + 

Start Color IO airyblue < >  Load Del Save

End Color IO airyblue < >  Load Del Save

loaded settings from ~/code/perl/modul/App-GUI-Harmonograph/img/schnecke_2.ini

Harmonograph

Harmonograph 0.55

Settings Image Help

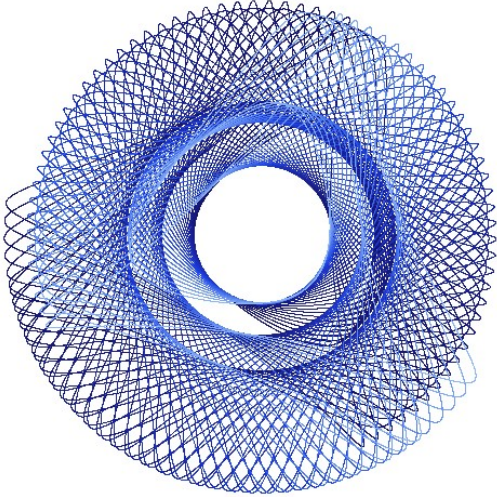


Image: Draw

Series: Dir ~ good 0 Save INI

done complete drawing

Lateral Pendulum Settings Rotary Pendulum Settings **Pen Settings**

Length 35 - + Density 50 - +

Line Thickness 1 - +

Color Change linear Step Size 1 - +

Dynamics 2 Dir. Period 10 - +

Start Color

R 20 - + H 240 - +

G 20 - + S 69 - +

B 110 - + L 25 - +

End Color

R 155 - + H 217 - +

G 191 - + S 87 - +

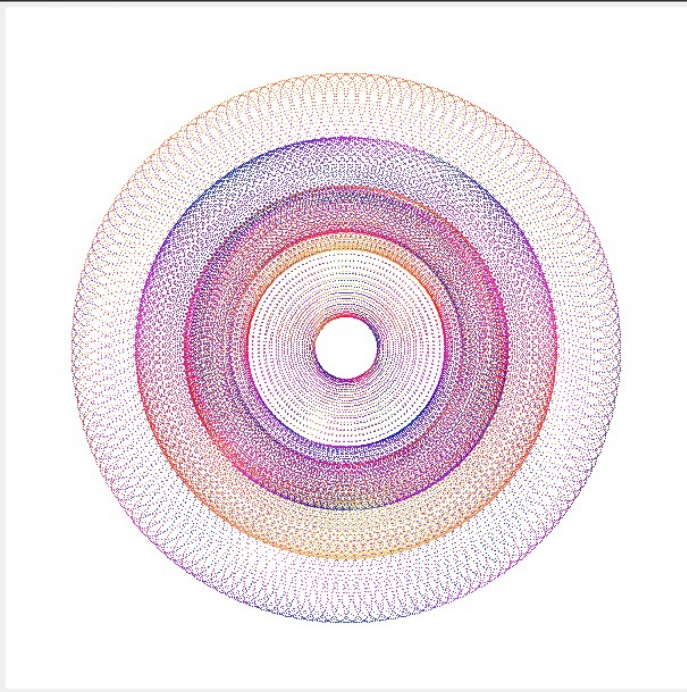
B 248 - + L 79 - +

Start Color IO aspengold < > Load Del Save


End Color IO amberglow < > Load Del Save

loaded settings from /home/herbert/code/perl/modul/App-GUI-Harmonograph/img/schnecke_2.ini

Harmonograph



done complete drawing

Pen Color:  Draw

Series: Dir ring INI Save

loaded settings from /home/herbert/code/perl/modul/App-GUI-Harmonograph/examples/setting

Linear Pendulum Epi Pendulum Rotary Pendulum Functions Visuals **Colors**

Color Set Store

Del

Colors Set Function

Gradient Complement

Currently Used Colors

Selected Color

R - +

G - +

B - +

H - +

S - +

L - +

Color Store

Del

Harmonograph

The screenshot displays a software interface for generating harmonograph patterns. The main window shows a complex, multi-lobed fractal-like pattern composed of numerous overlapping lines and points, rendered in a color gradient from purple to red. The interface includes a menu bar with "Settings", "Image", and "Help". Below the main window is a color bar labeled "Image:" and a "Draw" button. At the bottom, there are fields for "Series:" with values "Dir", "~/code/perl/modul/App-GU", "ring", "8", "INI", and "Save".

The right-hand side of the interface features a control panel with tabs for "Linear Pendulum", "Epi Pendulum", "Rotary Pendulum", "Functions", "Visuals", and "Colors". The "Functions" tab is active, showing a grid of controls for various series:

- X:** coth = 1 1 X time
- Y:** \sin = 1 1 Y time
- E:** \cos = 1 1 E time
- F:** \sin = 1 1 F time
- W:** \cos = 1 1 W time
 \sin = 1 1 W time
- R:** \cos = 1 1 R time
 \sin = 1 1 R time
 \sin = 1 1 R time
 \cos = 1 1 R time

At the bottom of the control panel, it says "no file loaded".

Harmonograph

