

# WEBINAR-TOPIC: "Visualising Maths using KmPlot"



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**National ICT Awardee-2012**

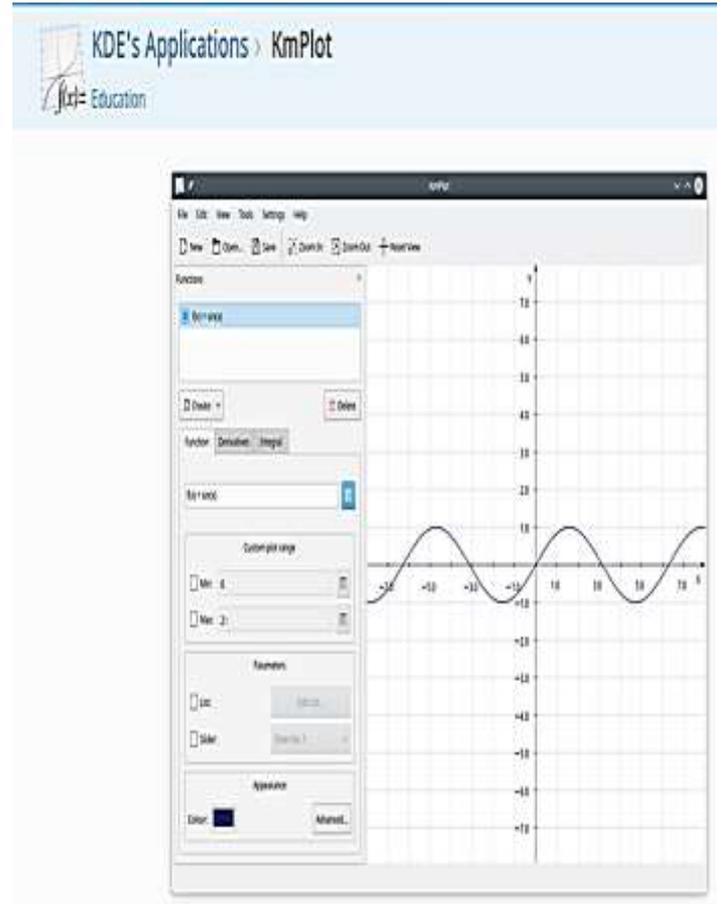
**LECTURER PHYSICS  
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# KmPlot

What is KmPlot?

Who can use this Application?

Why it is Useful ?



# KmPlot is a mathematical function plotter for the KDE-Desktop.

You can plot different functions simultaneously and combine their function to build new functions. KmPlot supports functions with parameters and functions in polar coordinates. Plots may be printed with high precision in correct scale.

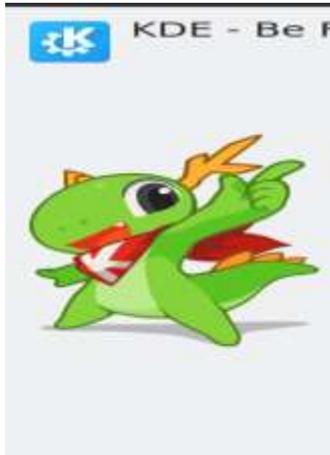
All teachers, students from higher and sr secondary or graduate, research scholars or anybody those are related to sciences and mathematics or statistics anywhere in the world. Its very much closed to Geogebra applet or Graph monkey to trace graph for different functions.

## Useful and applications

- different plot types (functions, parametric, polar)
- highly configurable visual settings (plot line, axes, grid)
- export to bitmap format (BMP and PNG) and scalable vector graphics (SVG)
- save/load complete session in readable xml format
- trace mode: crosshair following plot, coordinates shown in the status bar
- support zooming
- ability to draw the 1st and 2nd derivative and the integral of a plot function
- support user defined constants and parameter values
- various tools for plot functions: find minimum/maximum point, get y-value and draw the area between the function and the y-axis

Source:

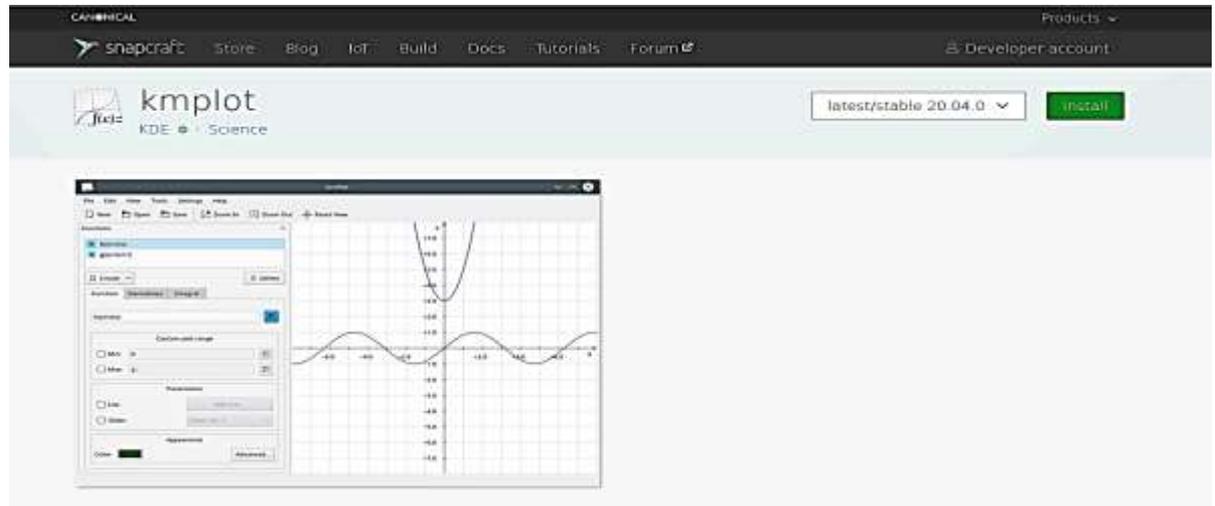
<https://www.kde.org/>



KDE is a world-wide community of software engineers, artists, writers, translators and creators who are committed to [Free Software](#) development. KDE produces the Plasma desktop environment, hundreds of applications, and the many software libraries that support them.

KDE is a cooperative enterprise: no single entity controls its direction or products. Instead, we work together to achieve the common goal of building the world's finest Free Software. Everyone is welcome to [join and contribute](#) to KDE, including you.

Visit <https://www.kde.org/> for more information about the KDE community and the software we produce.





# KDE's Applications > Education

## Education

### Applications



Artikulate  
Artikulate Pronunciation  
Trainer



Blinken  
Memory Enhancement Game



Cantor  
Frontend to Mathematical  
Software



GCompris  
Educational Game for Children



KAlgebra  
Graph Calculator



Kalzium  
Periodic Table of Elements



Kanagram  
Letter Order Game



KBibTeX  
BibTeX Editor



KBruch  
Exercise Fractions



KGeography  
Geography Trainer



KHangMan  
Hangman Game



Kig  
Interactive Geometry



Kiten  
Japanese Reference/Study Tool



Klettres  
Learn The Alphabet



KmPlot  
Mathematical Function Plotter



KStars  
Desktop Planetarium



KTouch

Touch Typing Tutor



KTurtle

Educational Programming Environment



KWordQuiz

Flash Card Trainer



LabPlot

Plotting and Data Analysis Software



Marble

Virtual Globe



Minuet

Music Education Software



Parley

Vocabulary Trainer



Rocs

Rocs Graph Theory



Step

Interactive Physical Simulator



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**How it can be Used ?**

**&**

**Features of**

**KmPlot**

<https://edu.kde.org/kmplot/>

- KmPlot is a program to plot graphs of functions
- their integrals or derivatives.
- The graphs can be colorized and the view is highly configurable, is scalable, and zoomed.
- It can plot graphs of types (cartesian, parametric, polar, implicit, differential)
- It provides simple mathematical tools like for finding maximum/minimum of a function
- Plots can be exported as bitmap format pictures (BMP, PNG)

File Edit View Tools Settings Help

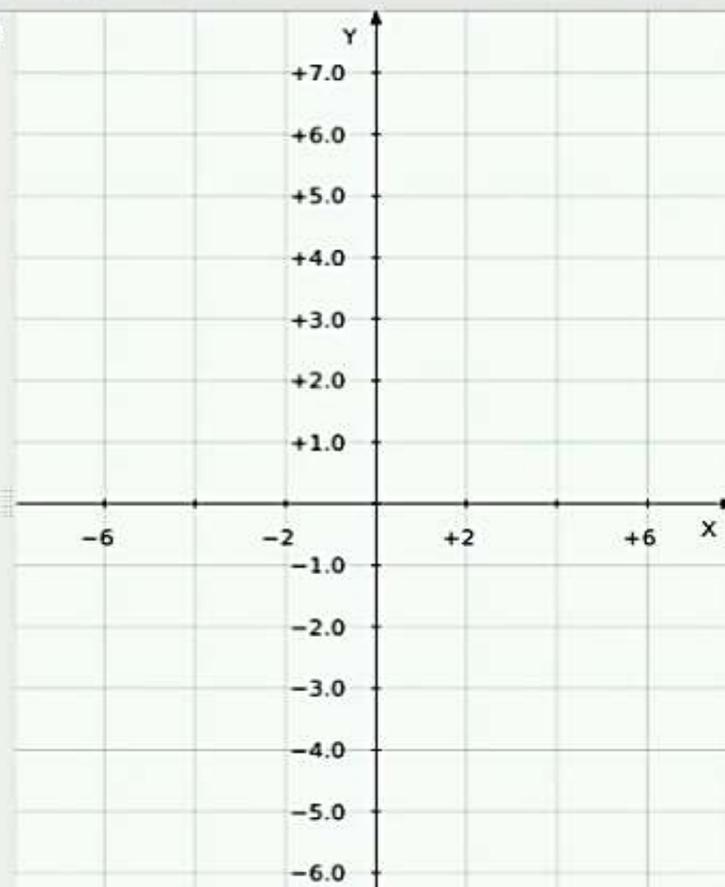
New Open Save Zoom In Zoom Out Reset View

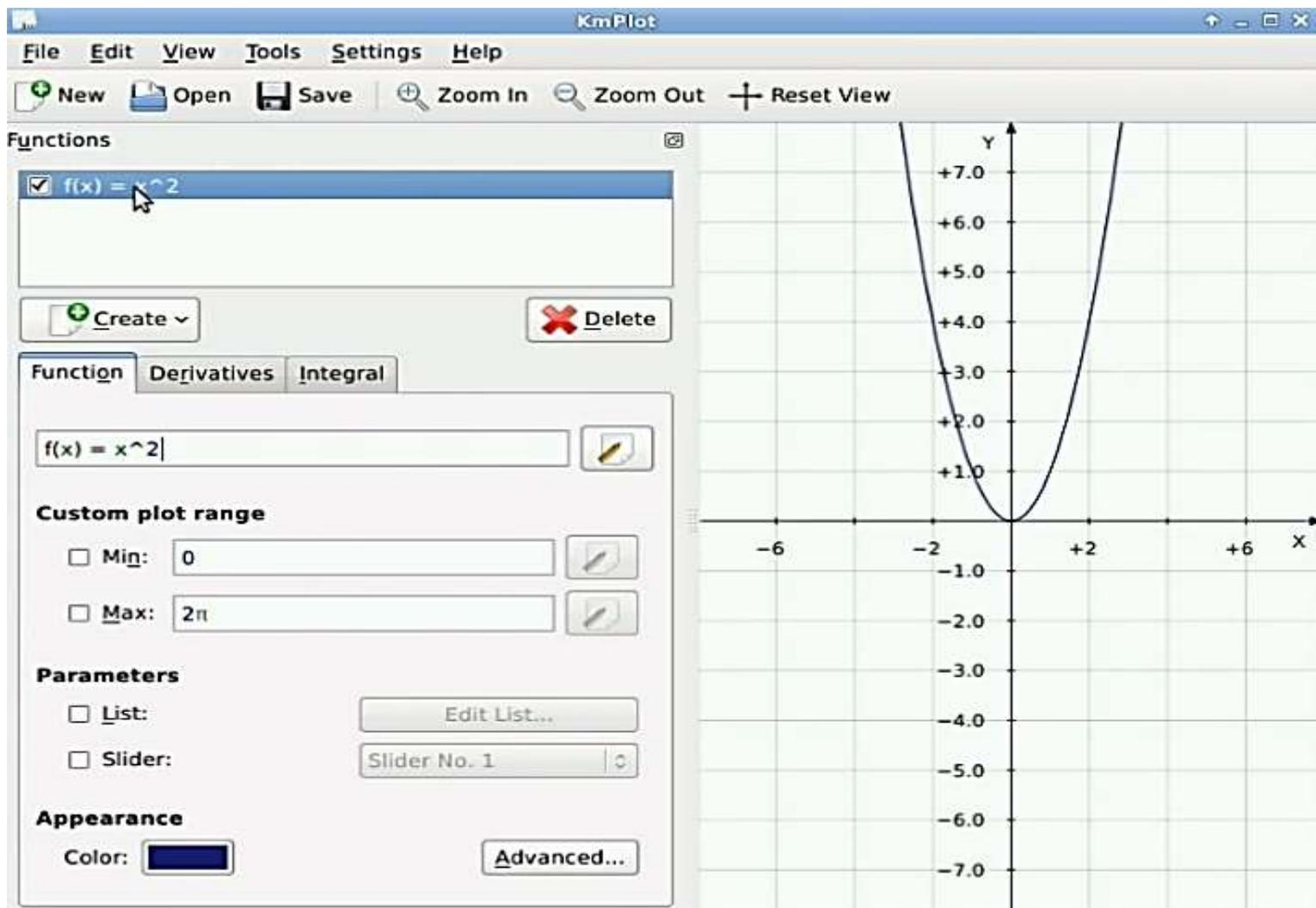
Functions

Create ▾

- Cartesian Plot
- Parametric Plot
- Polar Plot
- Implicit Plot
- Differential Plot

Delete





Functions

$f(x) = x^2$

$g(x) = \cos(x)$

Create ▾

Delete

Function Derivatives Integral

$g(x) = \cos(x)$

Custom plot range

Min: 0

Max:  $2\pi$

Parameters

List:

Edit List...

Slider:

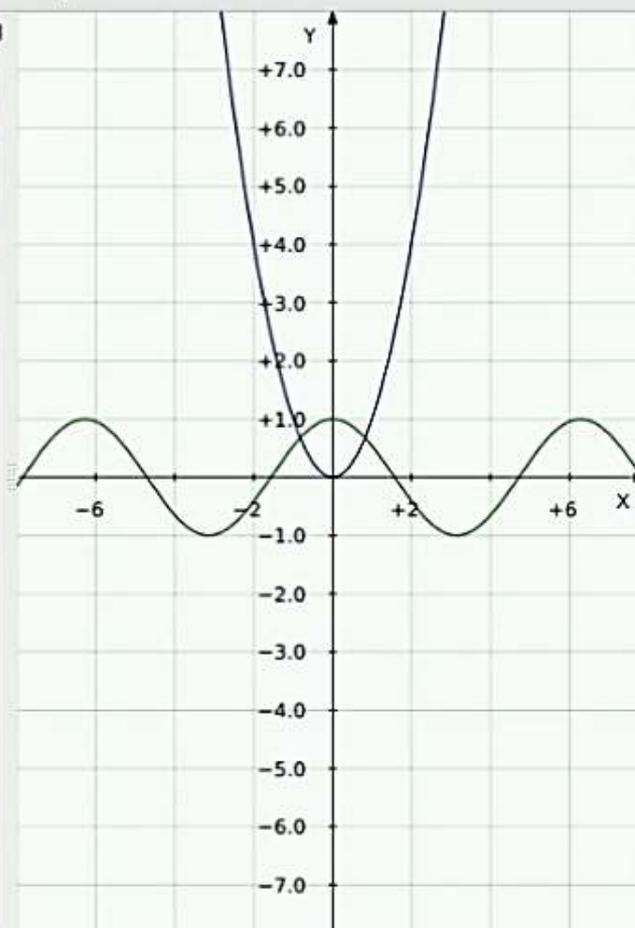
Slider No. 1

Appearance

Color:



Advanced...



File Edit View Tools Settings Help

New Open Save Zoom In Zoom Out Reset View

Functions

parabola(x) = x<sup>2</sup>

g(x) = cos(x)

Create

Delete

Function

Derivatives

Integral

g(x) = cos(x)

Custom plot range

Min: 0

Max: 2π

Parameters

List:

Edit List...

Slider:

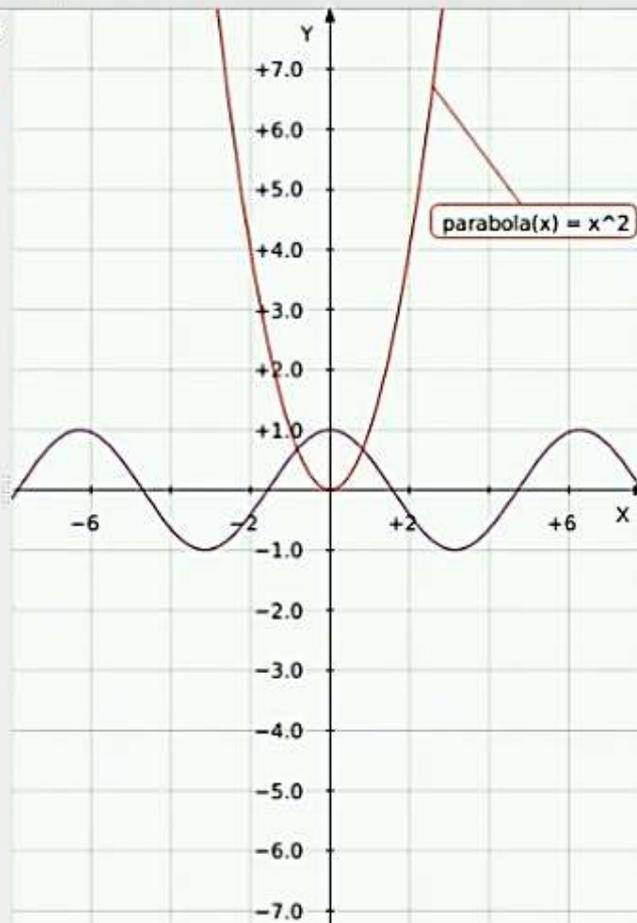
Slider No. 1

Appearance

Color:



Advanced...



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# Install kmpplot on your Linux distribution

Choose your Linux distribution to get detailed installation instructions. If yours is not shown, get more details on the [installing snapd documentation](#).



Arch Linux



CentOS



Debian



elementary OS



Fedora



KDE Neon



Kubuntu



Linux Mint



openSUSE



Red Hat Enterprise Linux

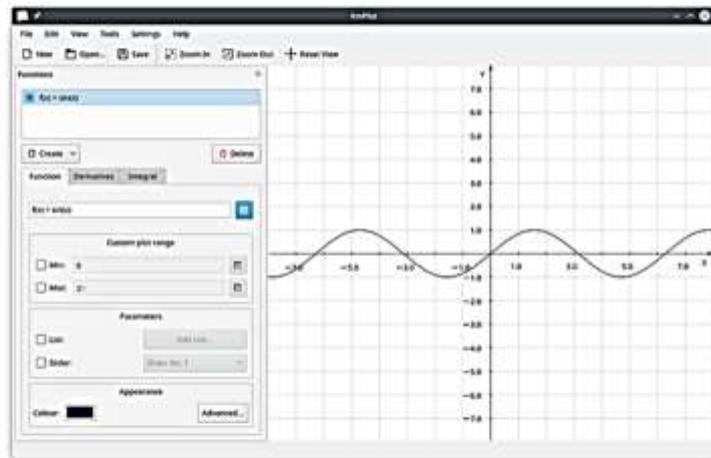


Ubuntu



# KDE's Applications > KmPlot

Install on Linux



KmPlot is a program to plot graphs of functions, their integrals or derivatives. The graphs can be colored and the view is highly configurable, is scalable, and can be zoomed. The program features a powerful mathematical parser, different plot types (cartesian, parametric, polar, implicit, differential), and provides simple mathematical tools like for finding maximum/minimum of a function. Parametrized functions can be visualized by adjusting the variable parameter via a slider. Plots can be exported as bitmap format pictures (BMP, PNG) and can be printed.



## Details for KmPlot

[Project website](#)

## License

GPL-2.0+

## Get Help

[KmPlot Handbook](#)

[KDE Community Forum](#)

# **Installation & features of KmPlot**

**Let's try here**

**Hands on session**