



# KAlgebra





## Who am I?

**My name is Aleix Pol Gonzalez (aka apol).  
From Barcelona, and I'm studying computer  
science in FIB (UPC).**

**I am contributing to KDE with KAlgebra and the  
KDevelop summer of code  
Blog: <http://proli.net>**



## Introducing KAlgebra

**KAlgebra is:  
More than a calculator, a simple CAS**

**KAlgebra is not: (yet?)  
The tool to use to write your PhD thesis  
A tool that lets you send rockets to the moon**



## Use cases

- Need a calculator to do a couple of simple things
- Need to see what a function looks like
- Future: Need a library that calculates things.



## Overview

**KAlgebra has 4 main sections:**

- **Console**
- **2D Graph**
- **3D Graph**
- **Dictionary**



# Console

**Used as a normal calculator:**

- **To calculate an operation**
- **To define variables**
- **To define functions to interact with**



## 2D Graph

Now we can plot explicit functions

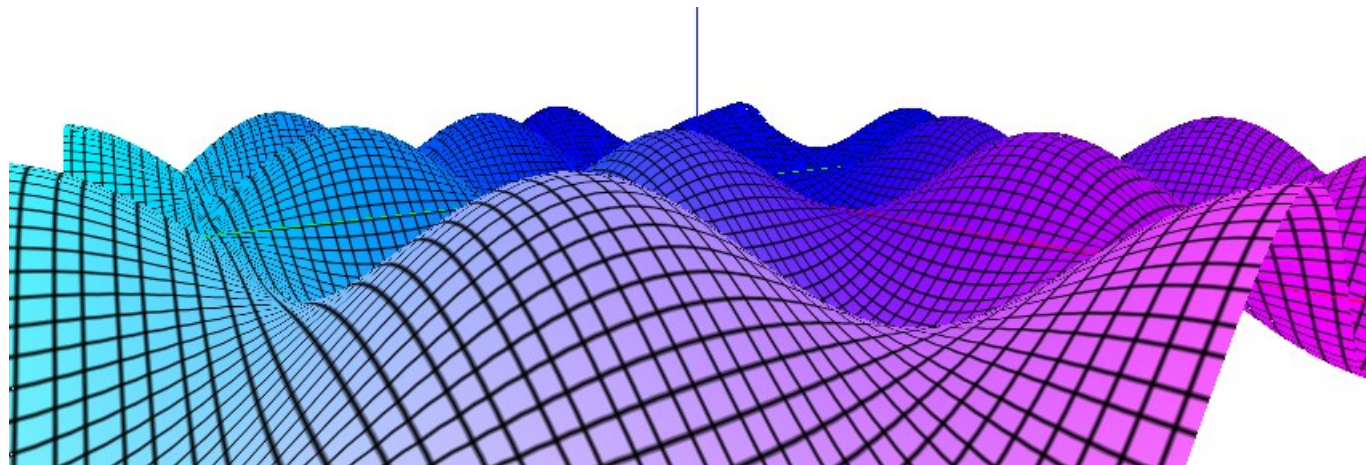
- $y=f(x)$
- $x=f(y)$
- polars





## 3D Graph

**Plots explicit functions also. e.g.  $z=f(x,y)$   
Nice drawing features.**







## Learning to use it

**Easy to learn:**

- **Dictionary**
- **Autocompletion**
- **Parameters assistance**



## Relationship with MathML

**MathML is a W3C standard**  
**KAlgebra uses a subset called Content Markup**





## Future Works

- **Library**
  - **Matrix capabilities**
- **More Algebra (implicit functions)**
  - **Conditions/Loops, full language**



# Questions



## History

**Began in 2005. DOM**

**First algebra attempts**

**Summer 2006 port to qt4**

**New Analitza module**

**Entered playground in early 2007, then KDE-Edu**