

# Intro to PyQt

Or how easy it is to make a quick and dirty GUI

[https://github.com/javierggg/pyqt\\_intro](https://github.com/javierggg/pyqt_intro)

# Initial Comments

- Qt is a C++ library with two common Python wrappers: PyQt and PySide. There are several ways to use Qt, and tons of functionality. I know only a bit.
- I do not consider myself an expert
- Qt is easy to use for quickly writing an interactive display
- Qt is my go-to for writing graphical interfaces
  - A few times I have started writing an animation with matplotlib. That quickly grows... and I would end up with Qt.
  - PyQt allows me to start something small and then grow.

# Initial Comments

- PyQt offers lots of features:
  - Matplotlib widget
  - IPython widget
  - Built-in web browser
  - Powerful styling, for the graphically inclined
  - It is possible to write code in C++ if really needed (although there is more complexity in C++)
- It also has some idiosyncrasies... Which I don't think we will mention.

# Contents

- Hello world +
  - General intro: widgets, buttons, dialogs...
  - Signals/slots
  - Layout classes
- Star plot
  - QGraphicsScene/QGraphicsView
  - Events
  - Mouse events
- Some extras:
  - Embedding matplotlib
  - Displaying a web page

# Where to get Information?

- By far, most of the time I use Qt's C++ documentation:
  - <https://doc.qt.io/qt-5>
- PyQt documentation is not as good (IMO).
  - <https://www.riverbankcomputing.com/static/Docs/PyQt5>
- There is a wiki, but seems to have lots of outdated info:
  - <https://wiki.qt.io/Main>
- Online tutorials:
  - <https://www.learnpyqt.com>
  - <http://zetcode.com/gui/qt5>
  - [https://www.bogotobogo.com/Qt/Qt5\\_TutorialHelloWorld.php](https://www.bogotobogo.com/Qt/Qt5_TutorialHelloWorld.php)
- And of course stackoverflow.