



# Plotting: The Next Generation

*I am kind of a paranoid in reverse.  
I suspect people of plotting to make me happy.*

—J. D. Salinger

# Topics

- Plotting Use Cases
- Big Data
- GUI/Plotting Package
- Ad Hoc Plots

# Plotting Use Cases

- Viewer
  - Viewing images
- PlotMS
  - Viewing MS and Calibration Data
- Others?

# Big Data

- When data is big it might not be located near user's computer.
  - Viewing data requires remote access
- Simplest would be to use VNC
  - Sluggish response
- Split app across network
  - Viewer near user
  - Data access and crunch near data

# GUI & Plotting Package

- We should use a plotting package
  - Writing and maintaining our own is a lot of work.
  - Getting all features wrung out is hard.
- Plotting package should work with GUI package.
  - Otherwise GUI has to work behind the back of the plotting package

# GUI & Plotting Package (cont'd)

- Headless plot generation needed for scripting.
- CASA GUI package: Qt
  - Qwt plotting package exists and works with Qt.
  - C++ bindings (both to Qt/Qwt and CASA)
  - Requires kluge to run headless.
- Other options?
  - Java with JFreeChart or JavaFx
  - Python-based?