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#### March 30, 2024

#### 0.1 notebooks

the following tutorials introduce the concept of FullControl, walk through its capabilities, and give tips for creating designs in FullControl

they refer to *designs*, *state*, *things* and *results* which are defined in the broad overview tutorial notebook

links will work in vscode, jupyter lab, etc. - the notebooks can also be accessed online and run in google colab

### introductory documentation:

- 1. one-minute introduction to FullControl fast\_demo.ipynb
- 2. broad overview of FullControl overview.ipynb

## technical use of FullControl:

- 1. create a design in FullControl with built-in objects state\_objects.ipynb
- 2. format gcode gcode\_controls.ipynb
  - controls that can be used to adjust how a Full Control  $\operatorname{design}$  is transsformed into a 'gcode'  $\operatorname{result}$
- 3. format plots plot\_controls.ipynb
  - controls that can be used to adjust how a FullControl **design** is transformed into a 'plot' **result**
- 4. geometric modeling functions geometry\_functions.ipynb
  - demonstration of built-in geometry functions that can be used to create, modify or measure points (or lists of points)
- 5. other FullControl functions other\_functions.ipynb

## tips and examples:

- 1. design tips design\_tips.ipynb
- 2. example model (nonplanar spacer) nonplanar\_spacer.ipynb
- 3. example model (nuts and bolts) nuts\_and\_bolts.ipynb
- 4. design template design\_template.ipynb
- 5. design template for use in colab design\_template\_colab.ipynb
- 6. more designs are available on the fullcontrol gists page

# FullControl lab:

- 1. FullControl lab geometry lab\_geometry.ipynb
- 2. four-axis example lab\_four\_axis\_demo.ipynb
- 3. five-axis example lab\_five\_axis\_demo.ipynb
- 4. stl output lab\_stl\_output.ipynb