**Auto-cresting Procedure**

1. **Check input momentum is reasonable and return error if not**

mc.magnetControl()

1. **Degauss magnets**

mc.magnetControl()

1. **Zero quads and correctors**

mc.magnetControl()

1. **Monitor BPM01 and BPM02 to make sure beam is passing through**

??

1. **Set dipole current**

mc.magnetControl()

1. **Monitor charge using wall current monitor, find crest and take approx. -20° from this as rough crest**

mc.approxCrest() and scopeMonitor (in monitor interface)

1. **Check beam is there on YAG04**

mc.checkScreen()

1. **Check BPM03 Signal is there**

How would I do this? Just see if the BPM value changes over a number of counts?

1. **Vary phase and take data, fit curve and find crest**

mc.getData() and BPMMonitor

1. **Set phase to operation phase (which may be a particular distance from crest)**

mc.getData()

1. **Set gun amplitude to give x = 0 on BPM03**

mc.setRFAmp()

1. **Update the graph on the gui to show how good the fit is**

mc.updatePlot() (doesn’t work – still investigating why)

1. **Save the data to a file**

mc.saveData()

1. **Check YAG04**

mc.checkBeam()

Just call it a second time