

# How do I create events sampled from multiple sources using the GPS

The GPS can select from multiple, weighted sources event by event.

The following will generate 10 events, approximately half of which will be muons and the other half pions.

```
# muon
/gps/source/intensity 1.
/gps/particle mu-
/gps/position 0 0 0
/gps/direction 0 1 0
/gps/energy 10 GeV

# pion
/gps/source/add 1.
/gps/particle pi-
/gps/position 0 0 0
/gps/direction 0 1 0
/gps/energy 10 GeV

/run/beamOn 10
```