

# Turning ON/OFF HPS chicane magnets

- Two power supplies are used to power up the HPS chicane dipoles:
  - The 2 “Frascaties” (the first and the last magnets in the chicane) are powered from the Hall-B mini-T power supply. Each magnet has 2 independent coils, all 4 coils are connected in parallel
  - The analyzing magnet (known as the Hall-B pair spectrometer magnet) is powered from the Hall-B PSPEC power supply
- Turning ON the chicane – **Beam should be OFF** – :
  - open the “Magnet screen” GUI, from that GUI open “Analyzing Magnet” and “Frascati Magnets” GUIs. If “Mini-Torus” power supply is OFF open the expert GUI from the “expert” panel
  - for “Frascaties”:
    - turn supply ON using the “PS CMD ON” button on the expert GUI
    - set the current to 3500 A in the “Current Set” window and hit the “return” key. PS will start to ramp up – **NOTE: DO NOT SET above 4000 A** –
    - watch the “DAC ReadBack” value, when reaches to the set point wait for 15 min
    - then set the desire current in the “Current Set” window and hit “return” key
    - when “DAC ReadBack” reaches the set point (close to), magnet is ready
  - for analyzin magnet:
    - set the current to 2500 A in the “Setpoint” window and hit return – **NOTE: DO NOT SET above 2900 A** –
    - when “Readback” reaches to the set point wait for 15 min, then set the desire current in the “Setpoint” window and hit return
    - when “Readback” reaches to the setpoint (close to), magnet is ready
- Turning OFF the chicane – **Beam should be OFF** – :
  - set “0” in the “Current Set” window of the “mini-Torus Controls” GUI and hit return. When “DAC Readback” reaches “0” turn OFF PS by pressing “PS CMD OFF”
  - set “0” in the “Setpoint” window of “PSPEC Power Supply” GUI and hit return. Watch “READBACK”, when reaches to <100 A hit the “POWEROFF/RESET” button

Follow Hall probe readings to verify magnets ON or OFF state. When ON, the readings should be stable. Hall probe GUI can be open from “Devices/Lakeshore450”