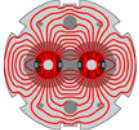


Second UFO MD, Sunday 28/8/2011

- Investigation on **the sources of the UFOs** seen at the injection kickers **MKI**. The **UFO rates** will be measured for specified beam condition, by **pulsing the MKI** on a gap in the partly filled machine.
- **Difference with previous MD**
 - This time test MKIs both IP2 and IP8, last time only IP8.
 - The big UFO storms happened at IP2
 - First MD was a proof of principle showing that:
 - We can pulse the individual kicker magnets
 - That we get interesting data by pulsing without injecting beam
 - As a dedicated MD, get more them and better statistics
 - This time we have extended BLM buffers, which allow us to measure the time difference between pulsing and the UFO
 - Also pulse the MKQ in a beam free gap to check the behaviour of continuously coated ceramic chamber
 - MKQ @ 450 GeV: kick 1.3σ for 2800 V (max), with a total pulse length of $7 \mu\text{s}$



UFO MD Plan

- Check procedure of pulsing a single kicker with 12 pilots in the machine for B1 & B2 (1.0 hours)
- Check kicking the MKQ, 4 kickers together with 12 pilots in the machine for B1 & B2 (0.5 hour)
- Fill the machine (0.5 hour)
- Fill the machine with 1236 bunches and pulse the injection kickers for both IP2 and IP8
 - All 4 MKIs (1.5 hour, pulse about every 2 min)
 - MKI-A only, B1 & B2 (1.5 hours, pulse about every 2 min)
 - MKI-D only, B1 & B2 (1.5 hours, pulse about every 2 min)
- Pulse the MKQ in the beam free gap (1.5 hours, pulse every 2 min)