B1H Instability: Fill 5520

- $\text{J}_{\text{oct}}=0\text{A}$, $N_b \sim 2.2e10$, $Q'=10/10$, emit=$1/2\text{um}$ ** (see next slide).
- B1H (protons) go unstable at FT, octupoles increased to $\text{J}_{\text{oct}}=120\text{A}$, problem solved.

- From linear scaling of DELPHI prediction, should be stable with these parameters for $\sim 10\text{A}$. Can imagine some uncorrected non-linearity could provide enough spread.
- Can plot intensity vs emittance and see if there is some threshold of stability that can give a number on how much this spread is.
- Given an offset of $\sim 2.2e10$, corresponds to around $\sim 12\text{A}$.
When using our usual BSRT data acquisition scripts, we calculate the emittances to be ~1.5-2.5um.

From the logbook there is different and erratic readings which we were not able to reproduce. Do we need to change some calibration factors?

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