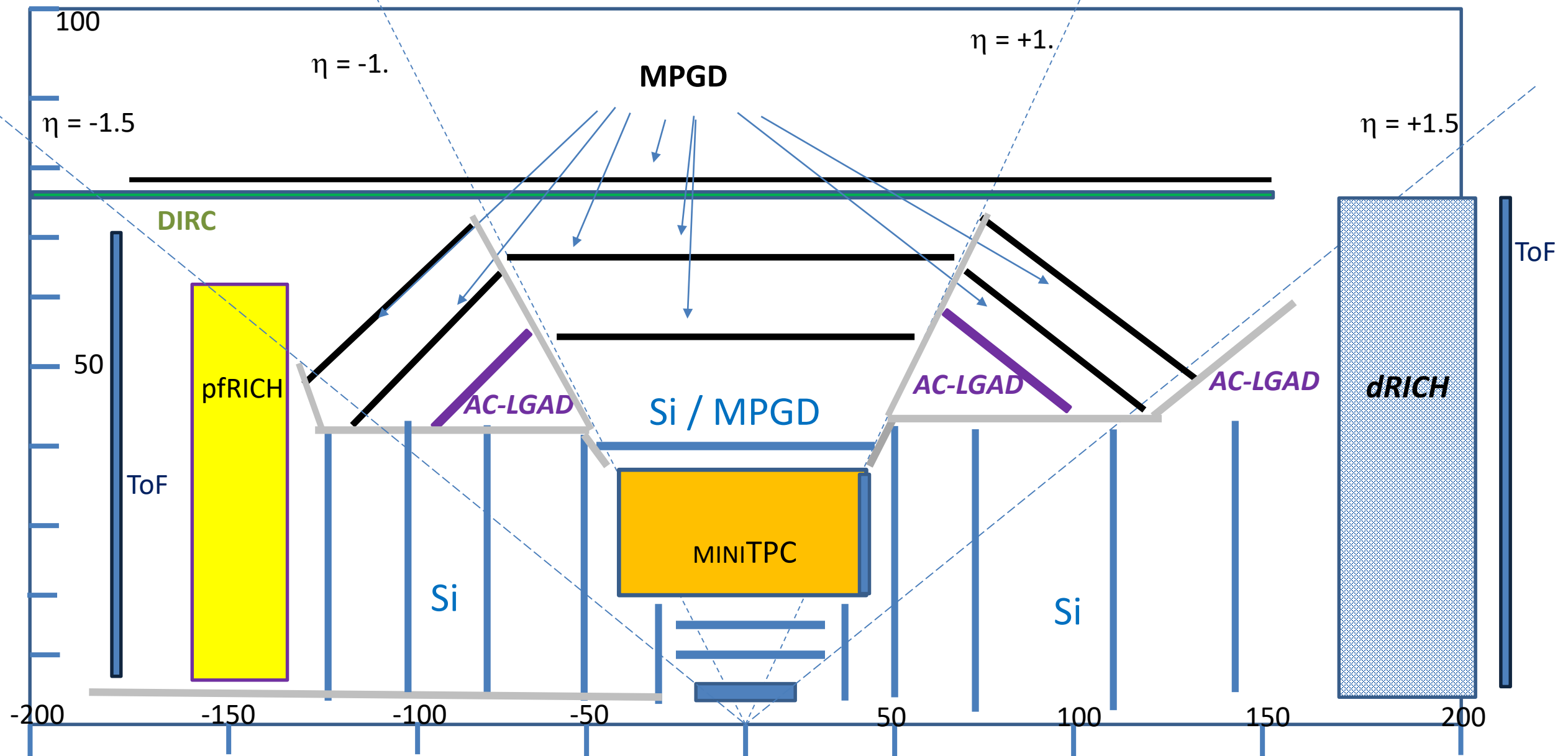


# GENERAL D1 tracking / PID comments

1. Original ECCE tracking / PID setup does not fit the YR request.
  - “Fast” simulations were done using unrealistic material thickness and hit smearing parameters with a misleading conclusion.
  - BaBar magnet, 1.4 T B-field is not good enough for high precision momentum reconstruction.
  - Very small number hits / track is extremely “sensitive” to background.
  - PID (ToF) proposed R-position does not work up to 0.3 GeV/c (~30% of all particles in +/- 1.5 rapidity).
2. A lot of barrel tracking simulation were done for (1. – 20.) GeV/c. The optimization should be done for (0.1 – 1.0) GeV/c (>85% of all (hadron) particles).
3. It should be checked / simulated the option of the barrel (+/- 1 rapidity) with miniTPC on (low mass, very good PID up to 0.7 GeV/c, ~3000 hits / track – exactly fits all demands for low momentum particle track finding and reconstruction ),  
and “projective” setup for +/- ( 1. – 1.5) rapidity. (Alexander’s original idea; see next slide).
4. Expedite the production of the “spare” magnet with ~(2. – 2.5) T B-field.

# Cartoon, as an idea for possible D1 setup



Cartoon → (KG modif), as an idea for possible D1 setup

