1. Track Fitter: SHOW STOPPER

- Needed by JGEM group
- Needed by Timepix group
- Needed for IB simulation studies
- ⇒ Something flexible would be ideal
- ⇒ Start by implementing existing algorithm from JGEM group.
  "*Don't wait for the final, ideal solution*"

(huge gap)

2. Prepare and collect correct GEAR pad layout descriptions and LCCD pad mappings
   - ⇒ Put them into the MarlinTPC repository?

3. Get B-Field (and E-Field) maps

4. Finish inter-processor track fitter interface (almost ready)

5. Implement EuDAQ producers

6. Develop calibration tools
   - Distortion maps

"The users should develop the software tools they need!"

Misunderstanding: This has always been the intention.

Coding guidelines

- Limit the number of external dependencies
  - Use stl, gsl and CLHEP
  - Use Minuit2 for fitting
  - Use AIDA for histogramming
  - Use ROOT only if AIDA etc. functionality is not sufficient
    - Only use root classes within one processor

- Do not hard-code geometry, use GEAR

- Do not hard-code conditions or cuts,
  use LCCD (preferred) or processor parameters

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Coding guidelines

- Limit the number of external dependencies
  - Use stl, gsl and CLHEP
  - Use Minuit2 for fitting
  - ~~Use AIDA for histogramming~~
  - Use ROOT wherever you find it useful
    - Only use root classes within one processor
- Do not hard-code geometry, use GEAR
- Do not hard-code conditions or cuts,
  use LCCD (preferred) or processor parameters

"The users should develop the software tools they need!"

Misunderstanding: This has always been the intention.

Coding guidelines (for the trunk)

- Limit the number of external dependencies
  - Use stl, gsl and CLHEP
  - Use Minuit2 for fitting
  - ~~Use AIDA for histogramming~~
  - Use ROOT wherever you find it useful
    - Only use root classes within one processor
- Do not hard-code geometry, use GEAR
- Do not hard-code conditions or cuts,
  use LCCD (preferred) or processor parameters

Within your private branch you are free to do whatever you want
- but you eventually might want your code to be in the trunk

These rules are intended to make the processors more general and improve usability for other groups.

They should never be a show stopper for your development!