



Forschungszentrum Jülich  
*in der Helmholtz-Gemeinschaft*



# ***TAG Tracking Current Status & Prospects***

TAG TRK Session

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# Tracking requirements

## Benchmark channels

- 4 tracking benchmark channels identified:
  - $pp \rightarrow DD$  with  $D \rightarrow K\pi\pi$  single sided
  - $pp \rightarrow \Lambda\Lambda \rightarrow p\pi p\pi$
  - $pA \rightarrow J/\Psi \rightarrow \mu\mu X$
  - $pp \rightarrow pp$
- anything else or should we “freeze” them now ?

# Tracking requirements

## Definition of tracking requirements

- now grouped into 3 section:
  - For the MVD, Central Tracker and Forward Tracker
- must be physics driven → needs serious results from simulations which will take some more time
- propose to put in charge for each sub-system one person who is responsible for collecting the data as soon as they are available
  - MVD: Fabian                      CT: ?                      FT: ?
- meanwhile we should start to think about the format and amount of data needed
  - which dependencies, which level of details etc.
- I encourage everybody to give an estimation of the expected performance of each detector
  - could be put into the new Wiki page (see later)
  - could serve as a preliminary 'reference' of the PANDA tracking system for the collaboration as long as the requirements are not settled

# Design choices and criteria

- Important design choices have been identified
  - Central Tracker: TPC vs. STT, skewed STT vs. double sided STT
  - Forward Tracker: MDC vs. Straws, Dubna MDC vs. Cracow MDC
  - Up to now I “ordered” the choices like: TPC vs. STT and if STT is chosen STT1 vs. STT2; may be better to consider it like TPC vs. STT1 vs. STT2 ?
  - Any other or should we “freeze” them now ?
- A lot of criteria for design choice have been given
  - Are there any other? Please give more input here!
  - Should start to distinguish the criteria for the different choices or at least mark the most important ones for each decision
- Must start discussion about the timeframe for these decision
  - How long the prototype testing will take?
  - ...

# Any other business

Panda Tracking Wiki page now available: <http://wiki.gsi.de/cgi-bin/view/Pandagtrk>

- meetings agendas and minutes
- room for the current status of our work and discussions
- not much content up now, everybody is invited to put whatever he/she thinks is useful
- only tag member can edit the content
- up to now the Wiki is visible only for members; I will make it open for the collaboration soon if nobody objects

