

Q: What software tools are currently missing and impede progress in the detector development effort?

A: Software. We do not need any additional software. The eicROOT-based tracking “sandbox” provided this week by Alexander, which would allow us to quickly look at different scenarios for angular tracking resolution as a function of the polar angle, will be very useful. But aside from that, we would most benefit from support in implementing detector subsystems in fun4all.

Q: Please provide a list of priorities of the research projects.

A: The general priorities for this year are the following.

a) Bring the PANDA prototype to the US and prepare it for test beams at Fermilab. With the PANDA R&D program (and the CERN test beams) ending, there can only be very limited progress on the DIRC if we cannot make this happen.

b) The front end electronics (from Hawaii). We need to evaluate it as soon as possible to decide on a final direction. The backend (from INFN) would be nice but is not as urgent.

c) The dRICH prototype. If it does not get funded this year, there may not be enough time for the INFN groups to be ready for a TDR in 4 years.

d) Pixelated LAPPDs with good timing and position resolution. While improving the high-B performance is important for the final application, the rms timing and spatial resolution are needed for the LAPPDs to be used as a sensor for the prototyping effort. Otherwise we would have to rely on commercially available MCP-PMTs (e.g., Planacons) for this purpose.

e) To finalize and publish the PID performance determination for the mRICH, based either on the last beam test - or possibly one next spring if it turns out that the lack of tracking during that time will prevent us from extracting reliable value.

f) To carry out a high-B test run next summer where full advantage can be taken of the high-resolution timing capability.

Other activities within each area are lower priority.

Also, please note that retyping the budget on the slides I mistakenly swapped the values for CUA/GSI and GSU. The one in the proposal is correct, however.