Possible Projects under Discussion (I)

- DAQ/RO Electronics
 - Pro: STAR & (s)PHENIX have plenty of experience and expertise • overall AI/ML efforts at BNL need development

 - o good visibility and relevance
- Hadron Polarimetry
 - Pro: BNL world-expert, almost a must do
- Luminosity Monitor, OMD
 - BNL played leading role so far in overall design and DWGs.
 - Polish groups are committed.
- Far-Forward
 - Many components. BNL played leading role so far in overall design and DWGs. Vicinity to IR and machine people helps in the integration
- Roman Pots
 - Pro: STAR has experience in RP
 - matches with overall AC-LGAD interests

Possible Projects under Discussion (II)

ToF

- Pro: STAR has some expertise in ToF (gaseous)
- Little expertise in PO/NP in Silicon Sensor Technology
- AC-LGAD: interest in HEP
- Main player at BNL is Instrumentation not PO Already strong groups involved Rice, UIC, UCSC, ... (relation to CMS/MTD)
- Physics case?
- pfRICH
 - Designed at BNL (AK)
 - Moderate experience with RICH detectors
 - Possible tight connection wit LAPPDs
 - Reasonable physics impact
 - Det-1 has current mRICH but unlikely to stay (wait for PID group)
- Other PID
 - DIRC (GSI, CUA, JLab, SBU, ...) and dRICH (INFN, Duke) already in good hands



Possible Projects under Discussion (III)

- Tracking
 - Moderate experience on MPGDs
 - No experience in MAPS
 - Many groups already on board
- Calorimetry
 - Fwd already many groups actively involved SPHENIX/STAR has interest in EM participation
 - Barrel ditto (HCAL <-> sPHENIX of course)
 - Backwards
 - EEEMCAL consortium quite strong
 - Output Could Push and take over
 - Physics case?

Other ...

IMHO: PO/NP strong enough to take on several projects. Right now various subsystems not finalized (not on CD-2 level) so technologies might shift.

