# **PANDA-Status**

### (PANDA: Proton Antiproton Detector Array)

- Aims of the experiment
- Detector
- Simulations
- Hardware F&E
- Collaboration
  - Ongoing activities
  - Distribution of Work
  - Finances
  - Future Plans

### Finances

### **Fundings from National Agencies and Laboratories**

#### **EU-Projects:**

Network	•	PANDAnet	(570k€)
JRA's	•	Future DAQ	(1170 k€)
		Fast EM calorimeters	(1700 k€)
		Hyper Gamma	(720 k€)
		Internal Targets	(1020 k€)
		<b>RICH</b> Detectors	(2030 k€)

#### **INTAS-Requests**

## PID

#### **DIRC (Barrel)** (n = 1.47)

Babar Realization very costly 1-dimensional Readout + Time Information ?

#### **RICH (Forward Direction)**

Aerogel (n = 1.02)  $\leftrightarrow$  Visible Light Photo Detector (Problem: Rayleigh Scattering of UV-Light)

or

 $C_6F_{14}$  (n = 1.24)  $\leftrightarrow$  CsI coated Photocathode (UV)

## **EM-Calorimeter**

Most expensive component, dictates geometry of the whole detector

Materials: PWO, CeF<sub>3</sub>, BGO

PWO : Fast, relativ cheap

Not much light, Radiation resistant?

- $CeF_3$ : Ideal, but substantial R&D needed
- BGO : Factor 15 more light than PWO Slower, higher in price than PWO, Radiation resistant?

Read Out:

PM-Readout only if ECAL outside coil APD work astonishingly well Further possibilities: Triodes

## **Future Plans**

- Continuation of Simulation
- R&D Work
- -MoU
- Proposal/Technical Report

# Target

- Pellet-Target
  - Size of Pellets, Higher Frequency, Narrow Beam
- Cluster-Target
  - Higher Intensity, Pumps away from Interaction Point
- Super-Fluid He R&D needed
- Nuclear Target
  - Fine Wire, well positioned
- Polarized Target
  - Use of Solenoid Field for Polarization