

# **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€)
		RICH 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,  $\text{CeF}_3$ , BGO

PWO : Fast, relativ cheap

Not much light, Radiation resistant?

$\text{CeF}_3$  : 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