

# What happened in 2004 and plans for 2005

Roger Barlow

- BABAR
- Accelerators
- eScience
- Statistics
- CALICE
- and other matters

# BaBar

- EMC system manager

Kept calorimeter running (help from Nick and many others)

Developed/encouraged software improvements

- Machine Detector Interface

Simulations of backgrounds using TURTLE

- Tau physics

Helped lots of analyses by being on their review committee

Not much progress on my own

# Accelerators

LC-ABD bid successful (post-doc: German Kourevlev). Collimators and beam dynamics.

Cockcroft bid successful (£7M from PPARC) 3+1 new academic posts. First one now being advertised. Student (Adam) and more RA posts to follow.

CARE FP-VI bid successful (a few £K for travel)

EUROTEV FP-VI bid successful. Collimators and beams. (A further RA)

# eScience

Chair of GridPP Experiments Board till Summer - now passed it on.

BaBar GridPP2 bid successful (James). Others were not (LHC bias)

Job Submission not *quite* working. Yet.

Tier 2 centre looking great on paper (people + expertise + university commitment) but still virtual.

Tier 1/A centre board detached from reality. Allocate overwhelming share to LHC experiments even though they can't use it.

# Statistics

Second preprint on Asymmetric statistical errors (joining first on asymmetric systematic errors)

Need to combine 2 papers for publication. Visit to LBL later this month to talk to PDG about them.

Diversion to consider accuracy of  $\Delta \ln L = -\frac{1}{2}$  errors and Bartlett functions. Accepted by N.I.M.

Ask me to give a seminar!

Preparations for PHYSTAT05 (Oxford). Workshop on the 2 sample problem (i.e. whether 2 sets of data agree?) Alternatives to  $\chi^2$  and Kolmogorov-Smirnov tests.

# CALICE

Linear Collider Physics will be the major focus in 2015 (or so.)

Manchester needs to be part of this

We have had a free ride so far on CALICE - Prototypes for Calorimeter for the Linear Collider

Forthcoming bid to PPRP for next phase - activities by Ray + Co on Mechanics and by Scott + Richard + Co on DAQ. Minor level of involvement (10-30%) but non-zero.

Vital to harmonise with other new initiatives and ATLAS.

# Other Stuff

Taught Statistics course at Stanford

Birmingham IoP conference

CERN birthday party in London

IoP Particle Physics Prize being run again

EPS07 in Manchester

# Personal Priorities for 2005

- finish off EMC system commitment - continue fostering some developments, including work on incorporation of backgrounds (with Christina)
- Get 2 papers to PAC (BaBar backgrounds and Wakefields (with Adam and German))
- Statistics papers and PHYSTAT05
- Continue Second Class Current analysis (with Tim and Marta). Re-evaluate  $\pi^0$  loss caused by additional cuts devised to enhance signal
- Dublin conference. IoP Newsletter. Plan EPS07
- Get BaBar grid job submission system(s?) running effectively (with James and Mike)

# My Priorities for 2005 for the Group

- Make the Tier 2 centre become real
- New appointments - replacements for John and Ian, Accelerator lecturer(s), Accelerator RAs, Tier 2 systems managers, replacement for Dave
- Encourage and exploit research-friendly structure in new University
- PPRP bids for CALICE + FP420 + SuperNEMO
- Talk to everybody and listen to everybody
- Survive Refurbishment