JREI PC Farm

- What is the JREI?

- What did we get?

- What do we do with it?

What is (was) the JREI?

Joint Research Equipment Initiative:

- A scheme where UK research groups could bid for equipment in "partnership" with industry
  - commonly "partnership" = "discount"
- Has run for the last few years
- Final round was in May 2001
- Bids for up to £200k
- PPARC had £600k allocation

Final Round, May 2001

It seemed worth a go...

- Trigger simulation seemed our best bet
- Based scientific case on trigger optimisation
  - with nods to physics studies, Grid,...
- Bid for a PC farm
  - 30 dual 1.7 GHz P4 + 4 TB RAID
- Wrote & submitted a bid (in ~ 2 weeks)
  - Thought that would be the end of it......

Then five months later

They accepted the bid!

- I received an email saying that they would give us £100k
  - I'm still waiting for the letter…
- Money available from April 2002
- 6 months to spend it
  - slightly tighter schedule than we'd requested
  - but I guess we'll cope ☺

What will we do with it?

Trigger optimisation:

- How do we most effectively use the trigger?
    - existing "trigger menus" are hardly realistic
    - many possible lumi/background/physics scenarios
    - need to generate & analyse large data samples

Other uses:

- Other calorimeter trigger groups could use it
    - Grid-like application
- ATLAS service
    - contribute to data challenges
- Other simulation studies (e.g. physics)

What do we do next?

The bid has been scaled down:

- Bid for £174k, received £100k
  - but bid based on May 2001 costs
  - will be another round of negotiation before purchasing

Need more than hardware:

- Also need to ensure have software to run on it
  - use existing Linux PCs at Birmingham to learn before Farm arrives

But will give us the capability to perform serious productions and studies ourselves