# 59<sup>th</sup> KLOE General Meeting

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#### Frascati, 28 March 2002

#### 1. Papers

2. Run

- 3. KLOE-DAΦNE
- 4. Backgrounds



#### Papers

For me the day the first paper of KLOE will appear is a very significant occasion. We shall celebrate.

Let us submit more!!



## RUN

From talks with Pantaleo

- 1. A production run.
  - (a) Our requests on  $\mathcal{L}$ , background rates etc will be strictly observed
  - (b) Machine study precisely scheduled
  - (c) Return to standard condition as a rule
- 2. Run begins  $\sim$ April 25, which appears consistent with our plans
- 3. 1+2 wks shutdown before October=End of Run
- 4. Bckgnd improved by  $\times 2$ ,  $\mathcal{L}$ ? 8-poles, scrapers
- 5. 94 bunches?



## ΚLΟΕ-DΑΦΝΕ

There will be a weekly DAΦNE-KLOE meeting. For both groups, an officially named responsible will give a summary of past week operations and request for beginning week.

On KLOE side:  $\int \mathcal{L} d t$  delivered  $\int \mathcal{L} d t$  on tape Live time Down Time Off time Week energy plot  $\sum$  EC-hot-count over week Max EC-hot-rate,



## Background

From LNF-SC

The machine will then go back to KLOE, running until the requested 500  $pb^{-1}$  will be collected.

The Committee expects that the 2002 period, with increased luminosity, homogeneous conditions and low background, will allow KLOE...

From Pantaleo

We will operate strictly in the conditions you will tell us

But what do we want for background and  $\mathcal{L}$ ?

I insist in reminding everybody that  $Bckgnd/\mathcal{L}$  is very misleading.

In fact 1/Q=N(contaminated events)/N(total) is proportional to the background count, not to the above ratio.



We must understand before April 15 where we stand, in order to make reasonable requests. We better not throw away  $\mathcal{L}$ , we also better not have too many illusions about what we will do with our new data.

Our best option-hope is to make very clean, precise measurements.

I had asked for  $R^{\pi} = N(\pi^{+}\pi^{-})/N(\pi^{0}\pi^{0})$ , uncorrected, vs EC-hot rate for the first 5 m and the last 5 m of each fill, for the end 2001 data for which there are -not quite- DSTs.

It turns out that the "*n*-tuples" very cavalierly ignore every thing about run conditions: no  $\mathcal{L}$ , bckgnd estimators or some universal time stamp. That is really a bit too crude.





It appears that to produce DSTs for some 10 1/pb might take  ${\sim}10$  hours.

WE MUST PROPERLY SCHEDULE IT AND DO IT.

Then I want to see  $R^{\pi} = + -/00$  above and also  $R^{3\pi^0} = N(K_S \rightarrow \pi^0 \pi^0 \pi^0)/N(K_S)$ , raw, uncorrected, the same way. Probably the same thing should be done for some ratio of rates for  $K^{\pm}$ .

There are also the low background runs. The above info still needed.



#### DAΦNE mid-longer range

- 1. Could run 90 bunches, lower I/bunch, lower Touschek, longer  $\tau$ , lower background
- 2. Change IR quads, 3 quads with one inversion is unique to DA $\Phi$ NE. Better  $\mathcal{L}$ , lower bckgnd...
- 3. Change arcs...

