### (Soft) concluding remarks

#### **M. Sozzi** NA48 and Pisa

## A golden rule...

It is the duty of a good experimentalist not to care about theoreticians...

Young's Law:

"All great discoveries are made by mistake".

... except when their input is badly needed (as it is almost always the case)

... except when they have bright ideas (as it is often the case)

... except when they are to be blamed for missing computations (as it is sometimes the case)

## What did we (I) learn?

from a very enjoyable informal workshop

•CPC contribution to piO II is under control, also for muonic mode

•Interference of CPV contributions to piO II is very likely constructive (Vtd, but mostly new physics)

- •Charged K CPV asymmetries are hard, but they are hard also for theoreticians
- •Epsilon prime continues to be very hard, but it continues to keep theoreticians busy
- •"Straightfoward" data can provide unexpected handles on physics, nice surprises can lurk around every corner (of the Dalitz plot)
- •Old issues are still (again) a deep (and tricky) subject of study

And I hope our theory colleagues also learned something from us...

May 5th 2004

NA48 K mini-workshop

### A long time ago, on Nov. 19<sup>th</sup> 2002...

- We had several of you here at CERN, for a kaon miniworkshop. You came again: thank-you !
- Some of you were not there and joined now: welcome !
- We were preparing for a completely new and technically challenging running mode with charged kaons: it really happened !
- We exposed you to our physics reach, extrapolating from a 6-hour test run: we know better now, and our hopes were reality !
  - A new e'/e result was waiting for theoretical assessment

## Today...

- •The main goals of NA48/1 were reached, with positive outcome: part of the landscape changed.
- •We have some 10<sup>11</sup> charged K decays on tape, the world's largest general-purpose sample
- •Some good progress on K also outside NA48 occurred, not really challenging our reaches
- •NA48/2 is about to run for a second year, and the collaboration is actively thinking about a rich future of K physics
- •An old e'/e result is waiting for theoretical assessment

# Thank-you for your participation

## See you at the next kaon workshop !