

Minutes of the October 30 2009 International Finance Committee Meeting

Attendees at Fermilab : M. Lindgren, D. Glenzinski, M. Votava, G. Bock, R. Roser, J. Konigsberg, J. Appel, F. Ukegawa, D-H Kim, F. Ferroni, L. Ristori, R. Snider, R. St. Denis

Attendees connected by Phone: K. Pitts, P. Giubellino, M. Lancaster, N McCubbin

E-mail statements: A. Ruiz, D-O Riska

All of the talks can be found on <http://www-cdf.fnal.gov/physics/ifc/2009-10-30/>

There were 5 presentations. Greg Bock presented the lab overview and plan for the coming years. Rob Roser presented the physics accomplishments of the experiment in the past year. Jaco Konigsberg discussed the overall budget status and “tax” for the coming year. Lastly, Rick St. Denis discussed the computing accomplishments and budget request for the coming year.

Greg said that the lab was beginning to make the transition to the intensity frontier. The lab and the funding agency (DOE) are fully committed to operating the Tevatron and CDF/D0 through FY11 with the goal of 10 fb^{-1} of analyzable data per experiment. This is a much stronger commitment by the Lab than what was presented in last years plan.

Rob reported that CDF had a very successful year in terms of physics thus far. 52 papers published in 2009 thus far. CDF gave >150 conference talks, graduated 30 Ph.D.’s and made 11 presentations at the Friday “Wine and Cheese” physics seminar. Among the highlights of the past year was the discovery of single top production, the discovery of the Omega_b baryon, evidence for a new baryon state $\Upsilon(4140)$, the world’s most precise top mass measurement just to name a few. The experiment is running well. The international scientists comprise ~50% of the overall CDF management team and are having a significant impact on all facets of the experiment. Rob also reported on the outcome of the May 2009 CDF institutional survey that he and Jaco performed: CDF expects to have enough people to run the experiment through FY11 and sufficient people to perform analyses in the years to come.

Jaco discussed the financial health of the collaboration. Last year, each IFC institution did contribute to the operating of CDF for a total of ~\$750,000. Thank you!

CDF spent approximately \$750k on bringing guests/visitors to the lab. In addition, the Fermilab International Fellowship program and the targeted INFN fellowships brought more needed help to CDF from Non-US institutions.

For the coming year, the budget request for the shared costs of CDF operations is \$2782K. This is up slightly from the previous year.

The "tax" is based on the number of PhD's on the experiment. This year, we did the Ph.D. accounting based on the May of 2009 survey mentioned above. From that, there were 373 Ph.D.'s on CDF in FY09. Prior years accounting was based on the author list and totaled 447.

Thus the tax is based on $\$2782k/373 = \$7458/\text{Ph.D.}$

Recall in 2006 the agencies agreed to cap the tax at \$6500/PhD for planning purposes.

Thus the overall tax for 2010 is \$6500/Ph.D.

It was noted that the shared expenses for 2009 were greater than budgeted. The reason was the experiment made some specific purchases (diesel generator, level 3 trigger computing, on-line computers etc) to insure that it was well prepared to run through 2011. These were noted as one-time expenses and that the experiment does not expect to be over budget in the coming year.

The overall CDF budget (shared + non-shared) did balance for 2009 meaning that the lab allowed the experiment to shift funds to cover its expenses and forgo other planned purchases. Given the tax for the coming year is lower than what is needed, CDF will again shift some of its non-shared resources into the shared pool in order to operate smoothly and under a balanced budget.

Comments from the Funding agencies

Alberto Ruiz – Spain (by e-mail):

The Spanish position is very favorable to the Tevatron running in 2011. CDF is making very strong contributions in the field of experimental particle physics. The Spanish groups involved have an appreciable contribution on different aspects of the experiment. The intention is to continue supporting those involvement as much as possible, encouraging new students to join CDF. As it is the case in most of the European Institutions, priority for the next years is LHC, so a progressive decrease of the involvement of the present groups is foreseen, due particularly to new commitments of the senior personnel in LHC. Nevertheless, we are aware of the importance of giving enough support for the running of the experiment and physics analysis.

Dan-Olof Riska – Finland (by e-mail):

While the current MoU between the Helsinki University of Physics (HIP) and CDF-II expires at the end of this year, the HIP group is eager to continue the CDF-II engagement for 2010. There are some changes in the HIP group, however: Kenneth Österberg has informed me that he is unable to continue, because his increasing engagements at CERN. Risto Orava will continue in CDF, as will Timo Aaltonen, Francesco Devoto, Petteri Mehtälä, while the continuation of Heimo Saarikko is still under discussion. Risto is responsible for the CDF project plan of the group for 2010. We view our CDF engagement as a great success, and congratulate you to the remarkable achievements of the collaboration and their visibility over the last year.

Norman McCubbin – UK:

Expects the UK to participate through 2011 with somewhat reduced effort each succeeding year. Funds for the coming year are tight and somewhat limited but remain cautiously optimistic – CDF is not large part of the HEP budget these days in the UK. The UK is undergoing a re-prioritization of priorities and that could shift the landscape somewhat. He complimented CDF for its success and said that it is running “as god intended it to run”.

Fumi Ukegawa – Japan:

Compliments to CDF for its success the past year. Japan continues to get good value from CDF and will provide similar levels of effort and \$\$\$ in the coming year.

Fernando Ferroni – Italy:

Pleased with the progress of CDF in the past year. They keep good track of progress through the year. Expect 2 new INFN fellows at CDF for the coming year. Very supportive of running through 2011 and will provide funding at similar levels level to this year modulo provided the interested remains within Italy.

Dong-Hee Kim – Korea:

Six institutions are participating on CDF and remain committed for the long run. Pleased with CDF's accomplishments. Have started building a very large GRID site specifically for CDF physics analysis and MC production. Currently being commissioned and on-line in the coming months.

Comments From Paolo Giubellino; chair of the Scrutiny Group

(These comments are a summary of an email Paolo sent as chair of the Scrutiny group to the other members of the International Finance Committee)

CDF had to go beyond its projected spending this year in order to better prepare itself for the now likely outcome of running this program through much of 2011. While it is understandable the reasons for the extra spending, but he (Paolo) is a bit worried for next year because of two main reasons:

a) This year overspending was due essentially to the simple aging of materials (the engine) and especially computers. The numbers in these categories have been reset to the "expected" values of last year. Yet, it would seem very surprising that no "new" such item is awaiting us this year. How confident can you be in this?

b) The capping to 6.5 k per PhD leaves some 20% of the costs foreseen for next year uncovered. How are you going to deal with the shortfall?

Moreover, how did you do this year? Have you borrowed from FNAL or did the lab pitch in extra funds?

It is clear that the costs remaining essentially stable, the cost per PhD of running CDF will increase in the future. You might want to ask the IFC to reconsider its standing on the capping, or anyway show that FNAL is willing to cover the difference. Otherwise one might worry about the proper operation of the experiment...

Following the discussion yesterday, my understanding is the following:

1) The Laboratory has been flexible this year in letting CDF use the under-spending on the non-shared (fully-FNAL) budget to cover the overspending on the shared budget. It is planned to do the same next year to cover the difference between the projected budget and the one billed to the funding agencies. Thanks to this constructive attitude of the host Laboratory CDF can honor the cap agreed in 2006 of 6.5 k\$ per PhD of contribution to the shared expenses.

2) The overspending this year is linked essentially to a few non-recurrent items purchased to ensure the extension of the run until 2011. They should not repeat themselves next year, so the budget plan should be sound.

3) CDF has in fact kept a constant spending profile although the data collected keep increasing considerably. The aging of hardware has had very marginal impact on costs.

4) The funding agencies have covered their portion of shared expenses for the current year, so the system in place seems to remain effective, and the commitment to CDF strong.

5) The decrease in the number of PhD physicists in CDF is certainly faster than desirable, but is not at a level that would endanger the proper operation of the detector and the funding of its expenses.

Overall, I think that the IFC scrutiny group should congratulate CDF for the effective management of resources and planning capabilities and the funding agencies for keeping solid their support, in particular FNAL who has allowed the balancing of sheets between shared and non-shared expenses.

Please let me know if you agree on my assessment, and if there are any further comments you would like to introduce.

Thank you for your collaboration, and please accept my apology for the last-minute exchange, but the startup of the LHC is making things very hectic here!

Best, Paolo