

Draft of the DZero IFC November 9, 2010 meeting minutes

Attendees (some by video): Christian Schwanenberger (Manchester, UK), Etienne Augé (IN2P3 – CNRS, France), John Womersley (UK STFC), Hanna Mahlke (Germany, BMBF representative), Volker Buescher (Mainz, Germany DZero consortium), Margaret Votava (CD, FNAL), Young-Kee Kim (Directorate, FNAL), Mike Lindgren (PPD, FNAL), Qizhong Li (DZero Algorithms and Computing coordinator), George Ginther (DZero Technical Integration Coordinator), Stefan Soldner-Rembold (DZero Spokesperson), Dmitri Denisov (DZero Spokesperson), Vlada Simak (Institute of Physics, Czech Republic), Gregorio Bernardi (IN2P3, French groups representative), Georgy Alkhazov (PNPI, Russian Ministry of Science), Yuri Yatsunenko (Joint Institute for Nuclear Research, Dubna), Milos Lokajicek (Institute of Physics, Czech Republic), Jeff Appel (Directorate, Fermilab).

Agenda

08:30 Working Breakfast/Discussions Snake Pit Meeting Room

09:00 Welcome and Fermilab program Young-Kee Kim

09:15 [DZero operations](#) G. Ginther

09:35 [DZero Computing](#) Q. Li

09:55 [Review of DZero's recent physics results](#) S. Soldner-Rembold

10:25 Coffee

10:45 [Review of the DZero future plans](#) D. Denisov

11:25 Statements from Agencies and Discussion

12:15 Working Lunch/Discussions Snake Pit Meeting Room

13:00 Adjourn

Discussions started during working breakfast at 8:30

Young-Kee Kim – described status and plans of the Fermilab program as well as plans and expectations of the Tevatron run extension beyond 2011. Fermilab PAC in June provided first opportunity for the community to discuss Tevatron run extension based on the revised LHC plan and energy and luminosity projection. The PAC met again in August and strongly recommended the extended Tevatron run in “any funding scenario”. Fermilab’s position has been to extend the run if extra funds are added to the present HEP budget in order for the U.S. to keep the

leadership position at the Intensity and Cosmic frontiers, in addition to the Energy frontier Tevatron. NSF and DOE reconvened P5 to examine the Tevatron extension. P5 recommended that the agencies proceed with a 3-year extension of the Tevatron program if the resources required to support such an extension become available in addition to the present funding for HEP. At a special meeting on October 26 HEPAP accepted the P5 report. Currently the Laboratory is working actively with OSTP and OMB to assure that Tevatron operations funding is in fiscal year 2012 President budget. We expect to learn around February 2011 about status of these efforts, when the President will present his budget proposal to lawmakers.

Mike Lindgren – CDF and DZero spokespersons worked very hard to assure extension of the Tevatron run on a very short time scale with great success. 15 fb-1 was “original” Tevatron goal back in late 1990’s and it could now actually be reached during Tevatron lifetime!

George Ginther – described successful, while challenging, data taking by the experiment with substantial increase in the data set over last year. George’s slides are available from the link above.

Qizhong Li – provided review of the experiment computing program, including generation of Monte Carlo simulation. Qizhong’s slides are available from the link above.

Stefan Soldner-Rembold – presented in depth overview of exciting physics results obtained by the experiment over last year. Stefan’s slides are available from the link above.

Dmitri Denisov – described future experimental program including potential of the three years Tevatron run extension. Details of the expected collaboration manpower and detectors aging effects for years 2012-2014 have been presented. Importance and benefits for the experiment from international cooperation have been highlighted. Dmitri’s slides are available from the link above.

After formal presentations all meeting participants provided comments briefly summarized below.

John Womersley (UK STFC) – we encourage all the UK groups involved in DZero to consider submitting proposals for extended funding support if the Tevatron run is extended. Since no overall increase in the UK high energy physics budget is expected, this extended Tevatron support would have to come from what was planned for LHC. All proposals, as usual, will be subject to peer review based on scientific impact and the amount of funding requested. STFC expects to have discussions with all the primary investigators involved. To help our planning, it is important that we learn about the President’s budget request (for Tevatron extended run) as soon as possible. Finally, congratulations to the Tevatron team for the excellent operation of the accelerator and the experiments for the many exciting results obtained!

Georgy Alkhazov (PNPI, MSU, ITEP, IHEP – Russian Ministry of Science groups) - ~50 physicists from Russian groups are working on the DZero experiment. Participation will continue, according to MoUs, as long as experiment is running and performing data analysis. Support of detectors and algorithms for which Russian groups are responsible will be provided. Most active analysis participation is in top, QCD and New Phenomena groups. Funding in 2011 is expected to be similar to 2010.

Christian Schwanenberger (representing UK groups on DZero) – all UK groups are strongly committed to DZero. Work actively on extending terms of scientists working on DZero. Plan to apply to STFC for new grants, if Tevatron run is extended. Will do everything to assure UK groups are actively involved in the experiment. Thanks to Fermilab for support of International Fellows, students and postdocs from UK groups.

Vlada Simak (Institute of Physics, Czech Academy of Sciences) – applied for a new grant to continue participation in DZero through 2014. Will learn about outcome in January 2011. Computing provided by Czech groups to the DZero experiment will be supported as long as DZero is operating.

Volker Buescher (Germany DZero consortium) – German consortium strongly supports physics goals of the extended Tevatron run. Current grant is to middle of 2012 with next grant cycle starting in the middle of 2012. German groups are committed to DZero and adding new students. Higgs to WW, top quark studies and New Phenomena searches are areas of German consortium interests. Decision about grant application in middle of 2011 will depend upon progress with Tevatron run extension, LHC status and other developments.

Hanna Mahlke (Germany, BMBF representative) – congratulations to DZero with excellent results! BMBF plans to continue support German groups working on the DZero experiment based on funding request submitted by the consortium.

Ursula Bassler (Saclay, France) – we strongly encourage Saclay scientists to continue active involvement in DZero program including students which we encourage to join DZero. Funding situation in Saclay and overall in France is not perfect: budget cuts at ~20% level are coming (including travel to Fermilab). Postdocs in France are no longer funded directly, so will have to apply for grants.

Etienne Auge (IN2P3, France) – similar to Saclay ~10% cuts are expected at IN2P3 in the next 2-3 years. All groups at IN2P3 will be affected, including DZero. If Tevatron run is extended, French groups will remain on DZero. We would like to be open for new exciting results from the Tevatron and LHC. Funding will be “year by year”, depending on budget and priorities as in the past. IN2P3 is actively involved in LHC detectors upgrades, but this has no overlap in terms of personnel with DZero activities. IN2P3 will continue to provide strong computing support for DZero for at least another year, after that situation will depend upon Tevatron run extension.

Gregorio Bernardi (IN2P3, France) - reminded that the d0-in2p3 physicists strongly support the extension of the Tevatron run for three additional years.

Yuri Yatsunenکو (JINR, Russia) – JINR strongly support extension of the Tevatron run beyond 2011 based on a set of exciting physics goals. JINR will continue support of muon system, algorithms and participate in QCD and b physics analyses. The group is planning to add 2 more PhD students in the next few months.

Milos Lokajicek (Institute of Physics, Czech Republic) – three Czech institutes are actively involved in the DZero activities. For 2011 DZero grant will be the same, but some local resources might be reduced. Current DZero grant is to 2012. The plan is to ask for a new grant to continue on DZero for four more years on the same level. Will continue to provide computing resources to DZero on the same level in 2011, but have to apply for new funds to buy new computers. Expect two (Vlada Simak) + one new students in Czech groups on DZero next year.

Comment on beyond 2011 Tevatron running – IFC meeting participants supported Tevatron operation beyond 2011 with the goal to increase data set to 16 fb-1 and to perform exciting set of new measurements. All groups express strong support for participation in the data taking and analysis of collected data.

The meeting ended at 12:15pm with a working lunch with discussions of the IFC meeting talks and presentations followed.