

DZero International Finance Committee October 1st 2011 Meeting Minutes

Attendees (some by video): **Christian Schwanenberger** (Manchester, UK), **Greg Bock** (Fermilab Directorate), **Vicky White** (Fermilab Computing CIO), **Tony Medland** (UK funding agencies), **Volker Buescher** (Germany DZero consortium), **Paul Grannis** (DZero Institutional Board Deputy Chair), **Qizhong Li** (DZero Algorithms and Computing coordinator and DZero Institutional Board Chair), **George Ginther** (DZero Technical Integration Coordinator), **Dmitri Denisov** (DZero Spokesperson), **Vlada Simak** (Czech Technical University, Czech Republic), **Gregorio Bernardi** (DZero Spokesperson), **Sergey Denisov** (Institute for High Energy Physics, Russian Ministry of Science), **Yuri Yatsunenko** (Joint Institute for Nuclear Research, Dubna), **Sudeshna Banerjee** (Tata Institute of Fundamental Research, India), **Milos Lokajicek** (Institute of Physics AS CR, Czech Republic), **Jeff Appel** (Fermilab Directorate), **Miroslav Cech** (Czech Technical University, Czech Republic), **Jan Ridky** (Institute of Physics AS CR, Czech Republic), **Liang Han** (University of Science and Technology, China), **Didier Vilanova** (Saclay, France), **Rupert Leitner** (Czech Technical University, Czech Republic), **Marc Besancon** (Saclay, France).

Agenda

09:00 Working Breakfast/Discussions Snake Pit Meeting Room

09:30 Welcome and Fermilab program **G. Bock**
[Fermilab Computing](#) **V. White**

09:45 [DZero Operations](#) **G. Ginther**

10:05 [DZero Computing](#) **Q. Li**

10:25 [DZero's recent physics results](#) **G. Bernardi**

10:55 Coffee

11:15 [DZero future plans](#) **D. Denisov**

11:55 Statements from Agencies and Discussion

12:45 Working Lunch/Discussions Snake Pit Meeting Room

13:30 Adjourn

Discussions started during working breakfast at 9:00 am

Greg Bock – welcomed participants of the IFC meeting and thanked all for participation. Tevatron program is a major success with excellent achievements in the detectors, computing,

analysis methods, physics results and education of young scientists. Greg confirmed that DOE is committed to support Tevatron data analysis in 2012 and beyond to finish Tevatron legacy measurements on the full data set. The laboratory is transitioning to the intensity frontier and Greg welcomed all DZero collaborators to consider joining future programs.

Vicky White – described the Laboratory computing program and future plans of support of Tevatron data analysis. Her slides are available from the link above.

George Ginther – described extremely successful data taking by the experiment over past year which became record year for delivered and recorded luminosity with 10.7 fb^{-1} written to tapes in Run II. George's slides are available from the link above.

Qizhong Li – provided review of the experiment computing program, including generation of Monte Carlo simulation. Simulation efforts, thanks to contributions from computing centers all over the world, are extremely successful and satisfy physics needs of the experiment. Qizhong's slides are available from the link above.

Gregorio Bernardi - summarized the experiment major results over last year. Importance and major benefits for the experiment from international cooperation have been highlighted. Gregorio's slides are available from the link above.

Dmitri Denisov – summarized the experiment future plans from bringing the detector to safe and stable exhibition mode to the list of legacy results expected on the full Tevatron data set. Dmitri's slides are available from the link above.

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

Sudeshna Banerjee (Tata Institute of Fundamental Research, India) – Tata Institute will continue active involvement in DZero till at least 2014 with about two people involved in the analysis of the DZero data. Sudeshna reported also plans for Panjab University and Delhi University based on input from representatives of these groups. These two universities are planning to continue participation in DZero with at least one new student joining the experiment in the next few months to participate in data analysis.

Volker Buescher (Germany DZero consortium) – Gridka will continue production of MC events for DZero providing ~25% of the experiment simulation. Members of the German groups will continue analysis of Tevatron data in 2012 in Higgs, top and New Phenomena groups. Formally funding for DZero activities ends in the middle of 2012, but some funding at university-level is expected beyond this date.

Tony Medland (UK funding agencies) – congratulated DZero, Tevatron, and Fermilab with excellent results and discoveries. These results have been obtained with sometime limited

resources making this success even more impressive. Tony commented that UK financial situation is rather difficult but STFC is planning to continue support of scientists involved in Tevatron analysis for a further year.

Christian Schwanenberger (Manchester University, UK) representing UK/DZero groups – UK groups efforts are spread over many critical areas of the experiment activities including leadership positions in many groups and two ex-spokespersons. UK groups are interested to participate actively in full Run II data set analysis and discussing options with STFC. Christian expressed gratitude of UK groups for Fermilab's partial local support of UK scientists working on DZero.

Vlada Simak (Czech Technical University, Czech Republic) – thanked Fermilab for support of his International Fellow term and visitors to Fermilab from his University. The funding for 2012 is available and efforts to assure funding beyond 2012 are ongoing. The group main physics interests are in top quark physics and in QCD.

Miroslav Cech (Czech Technical University, Czech Republic) – congratulated DZero with results obtained and expressed his support.

Jan Ridky (Institute of Physics AS CR, Czech Republic) – congratulated the experiment with excellent results obtained. Current funding for DZero activities is ending at the end of 2012 and request for extension beyond 2012 is in progress and prospects look encouraging.

Milos Lokajicek (Institute of Physics AS CR, Czech Republic) - grant to actively participate in the DZero experiment to the end of 2012 (on reduced in comparison with 2011 level) is secured. New funding requested through 2014. Institute of Physics will continue generation of MC events for DZero as one of the main contributors to the DZero simulation efforts.

Yuri Yatsunenko (Joint Institute for Nuclear Research, Dubna) – thanked Tevatron team for excellent performance. JINR group will continue active participation in DZero with about 8 scientists involved in data analysis in different areas, including QCD studies. JINR decided to continue support of the DZero group till 2014. Yuri thanked Fermilab for partial support of JINR visitors.

Marc Besancon (Saclay, France) – thanks to Tevatron and Fermilab for providing excellent opportunities for Saclay scientists to do world class physics. Saclay group will continue active participation in DZero with main efforts in top and Higgs groups.

Didier Vilanova (Saclay, France) – we are planning to add two new students to DZero and continue actively on analysis of full Tevatron data set. Overall funding in France for high energy physics is difficult, but we will try to provide as much support to our DZero scientists as possible.

Liang Han (University of Science and Technology, China) – our group is concentrating on electroweak and low mass Higgs studies. Two new students just came to Fermilab to stay for a few years and work on DZero analysis. The group is contributing in all areas of the experiment including data collection, particle identification and analysis. We plan to continue on DZero, assuming partial local support for our students from Fermilab, for at least another 2-3 years.

Sergey Denisov (Institute for High Energy Physics, Russian Ministry of Science) – groups from Russian institutions on DZero are planning to continue active participation in the experiment. MoUs with all groups have been signed for the next three years. Some reduction in funding in 2012 (~20%) is expected due to reduction in detectors support. Two new students will be joining DZero in 2012 with main areas of groups activities concentrated in New Phenomena, Higgs and top groups.

Gregorio Bernardi (IN2P3, French groups representative) – continue to participate actively in all areas of the experiment. Area of strongest contributions is low mass Higgs searches with participation in many other activities from New Phenomena to W mass measurement. Travel support will likely be reduced in 2012 as no shifts are planned. IN2P3 is planning to continue playing major role in providing Monte Carlo simulation for the experiment and funding for this activity is secured.

IFC meeting conclusion was that Tevatron data set is unique and all groups are interested, even in the current difficult financial situation in many countries, to participate actively in the simulation of Monte Carlo events, further developments of particle identification tools and physics analysis of the full Run II data set collected by the DZero experiment.

The meeting ended at 12:45pm with working lunch with discussions of the IFC meeting talks and statements followed (100% of lunch boxes have been used!).