

*Message from Dennis Kovar, Acting Associate Director of the Office of Science for High Energy Physics at the US Department of Energy, to members of the American Physical Society.*

Dear Colleagues,

The DOE High Energy Physics (HEP) budget is reduced by \$93.9M from the President's Request in the FY2008 Omnibus Appropriations act which has been signed into law. This is a 12% reduction from the President's Request, the latter of which both House and Senate committees had previously approved, and about an 8% reduction from the comparable FY2007 HEP budget. Since we were already  $\frac{1}{4}$  of the way through the Fiscal Year when the Omnibus was enacted, a significant fraction of FY2008 funds have already been spent, so achieving the required spending reductions is even more difficult, and requires painful choices.

The language accompanying the Omnibus bill specified that no FY2008 funding for the NuMI Off-axis Neutrino Appearance (NOvA) detector would be provided, and that funding for International Linear Collider (ILC) R&D and superconducting radio frequency (SRF) infrastructure would be limited to approximately  $\frac{1}{4}$  of the requested FY2008 level. All work on NOvA has been stopped, and given the timing noted above, the latter restrictions effectively stop all US work on ILC R&D and superconducting RF for this year. The future of the NOvA and ILC efforts are uncertain at this point, but we are working to preserve options for the US HEP program in the hope that the FY2009 budget is more favorable.

Excepting the directed reductions to NOvA, ILC R&D and SRF we have tried to the extent possible to protect the rest of the HEP program from further cuts. However, Congress did specify an approximately 1% general reduction to all programs on top of the specific cuts noted above, so all other programs will see this 1% cut on average. But given this caveat, other planned projects and R&D will go forward with approximately their planned funding profiles, and core research support should be at approximately the FY2007 level-of-effort.

The sudden and unanticipated work stoppage on NOvA and ILC unavoidably results in collateral damage to the rest of the HEP program. Significant cost savings would require laying off everyone working on those projects immediately. That is not achievable nor desirable. Thus the HEP office had to look for other large non-salary costs that could be reduced to meet the overall budget bottom-line. In the end this came down to a choice between running the Fermilab complex (Tevatron Collider and NuMI) or the SLAC B-Factory in FY2008 (or running both at  $\sim\frac{1}{2}$  or less of their scheduled operating weeks). Based on the guidance we have received from the scientific community (e.g.; HEPAP, P5, NAS, etc.), the operation of the Tevatron in FY 2008 has higher scientific priority. Thus the Tevatron and NuMI will operate on their planned schedule, and B-Factory operations will be terminated prematurely. This should not be considered a dismissal of the excellent and important science that the B-Factory has produced, but merely a statement of programmatic priorities in the face of difficult fiscal realities.

Along with these serious reductions to lab operations and planned projects, there will be very significant reductions in force at SLAC and Fermilab due to the overall budget constraints. There is also expected to be some workforce reductions at other labs and at universities. This loss of skilled and highly trained personnel will be difficult for our community and will have impacts beyond the delays in NOvA and ILC R&D since many laboratory staff work on multiple efforts. However, it will be necessary in order to move forward and prepare ourselves for the future of US high-energy physics.

DOE and NSF have charged HEPAP, through the P5 subpanel, to identify and evaluate the scientific opportunities and options that can be pursued at different funding levels for mounting a world-class, vigorous and productive US HEP program. This charge will be modified to take into account the change in landscape imposed by the recent budget. They will be working over the next few months to determine an optimal HEP program under various budget scenarios, and will be holding several town meetings to engage the broader community in the discussion about the future of the program. We encourage everyone to attend these meetings or make their voice heard by providing input to the P5.

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for High Energy Physics  
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