

Dear Mike,

Thank you for the frank and open conversation last Thursday concerning the future of Run II. Although we understand the budgetary and schedule pressures facing the Laboratory, we believe the plan presented is not in the best interest of the collider experiments, the Laboratory, or high energy physics – either at home or abroad. With discoveries of fundamental scientific relevance in the balance and the window of opportunity for exploiting them sharply defined, we believe that only one choice is available for the Laboratory's base plan for Run II: support of the full suite of upgrades to the Tevatron and the Run IIb detector upgrades. This plan places the Lab's priorities where they need to be: on the science available to the HEP community during the coming years when Fermilab is the world's frontier facility.

We greatly prefer a strategy with high reward to a strategy of low risk. While we fully appreciate that there is strong political pressure on you to minimize risk, we believe that this choice does not do justice to the physics opportunities before us. The conservative plan or base goal as presented at last Thursday's PMG will result in the termination of the detector upgrades before determination of the technical viability of the recycler and electron cooling has occurred. The justification for pursuing the collider upgrades will then inevitably be called into question. Should the performance of the silicon detectors degrade significantly at any point, without replacements having been built, the necessity of continuing to invest in further luminosity upgrades will be seriously questioned. In the end, there is a very real possibility that the base scenario will result in termination of the entire collider program, years before the availability of LHC physics data. Upgrading either the machine or the detectors, but not both, does not permit our field to capitalize on the vast investment already made in the Laboratory scientific and technical infrastructure and in the Run II physics program.

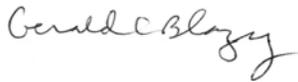
We would prefer to maximize the physics potential of Run II, fully recognizing that we are pursuing a relatively high-risk course. The plan may not succeed, but if it does – with or without a Higgs, SUSY, or other major discovery – we will have pursued science that is without question the best our field has to offer. The plan also permits a full exploration of the top quark and electroweak scales, still more avenues to unexpected physics. To forego such discovery opportunities would be a decision that is likely to have far-reaching negative ramifications.

We would argue that clearly demonstrating the ability and willingness of U.S. HEP leadership to garner the resources and apply them toward such a potential payoff is reason enough to pursue such a plan. The message must be sent, and the program pursued, that indicates that the science itself is worth the risk. Our entire field is founded on this underlying tenet. Like any investment, resources must be devoted to pursue such a project. But as long as the necessary resources can be identified, the potential payoff is so large that we believe the investment is fully justified. We would urge you to put whatever effort is required into the search for the necessary resources to realize this plan.

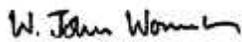
The stretch accelerator plan presented last week contains all the elements needed to potentially deliver $\sim 10 \text{ fb}^{-1}$ of luminosity to the experiments. We understand that it is an audacious plan, intrinsically high risk, and that it will present many managerial and technical challenges to the laboratory. We are ready and eager to work with you to help achieve it. We believe this is the only plan that makes sense, and is consistent with the Laboratory's physics program: full support of both the accelerator upgrade, including the recycler and electron cooling, and the detector upgrades.

The DZero Collaboration has enthusiastically pursued the Run IIb upgrade with the understanding that we are involved in a project that contains significant risk. We did so nonetheless, because the physics is compelling and unequalled. If Run IIb delivers all the physics we originally envisioned, we will be delighted. If not, we will be disappointed, but as long as we gave it our best shot, we will have no regrets. We do not want to see the opportunity lost by backing away from ambitious goals to avoid the possibility of defeat. This is an historic moment when a measure of boldness is required. While we understand the risks associated with pursuing such a course of action at this time, you can depend on our unremitting support in realization of this plan.

With best regards



Gerald Blazey
DZero Co-spokesperson



John Womersley
DZero Co-spokesperson