

**Fermilab Accelerator Advisory Committee  
May 13-15, 2002 Meeting**

**Charge (Rev. 14-April-2002)**

The May 2002 meeting of the Fermilab Accelerator Advisory Committee (AAC) will focus on the status of Tevatron Collider Run II operations. The committee is asked to review and comment on the initial operational experience with **Run II** with particular emphasis on the following points:

- Assessment of potential impediments to achievement of a luminosity of approximately  $5 \times 10^{31} \text{ cm}^{-2}\text{sec}^{-1}$  in the Tevatron over the next six months.
- Evaluation of the key underlying accelerator physics issues and the adequacy of the calculational support.
- Evaluation of the overall strategic approach to achieving the goal of  $8 \times 10^{31} \text{ cm}^{-2}\text{sec}^{-1}$  in the Tevatron over the coming year.
- Suggestions for overcoming identified impediments to Run II goals.

The committee will also hear presentations on a follow on second generation proton driver study, and Expression of Intent for a high brightness photoinjector, and the status of the Fermilab linear collider R&D program. Specific requests to the committee in these areas include:

- **Proton Driver Study II.** The committee is asked to review and comment on the current Proton Driver Design Study. In particular we would like input with regard to the adequacy of the study in terms of providing a basis for an R&D program, and the critical technical issues that would factor into a decision on a synchrotron vs. linac based implementation.
- **High Brightness Photoinjector.** The committee is asked to comment on how such a facility might fit into the overall picture of future accelerator R&D at the lab, and within the broader U.S. program.

The AAC will also be presented with a short status report on our linear collider R&D program. This presentation is intended to be primarily informative and as such no specific comments are solicited at this time. However, any comments the committee might wish to make are welcome.

It is requested that a concise report responsive to this charge be forwarded to the Fermilab Director by June 14, 2002.