Response to the charge:

1. Scientific goals: the goals are important and achievable with the technology that has been proposed.
2. Budget: The budget is reasonable, but is not highly refined and therefore there is a liklihood that it has been somewhat underestimated. It is much more likely that the labor has been underestimated than the M&S cost.
3. Schedule: The schedule is reasonable, but the same comments apply, namely, that it is likely to take somewhat longer than the proponents estimate.
4. Other issues:

Recommendations:
a. That the experiment should be rescoped to have a minimum exclusion of the PVLAS "signal" at 5 standard deviations over the allowed mass range.
b. That MOU's should be signed with PPD, AD, and TD to define the scope of work. The understanding of the committee is that:
i. AD will provide the laster system
ii. PPD mechanical will provide all the mechanical work required including the laser box, the PMT box, and the warm beam tube with plunger. PPD mechanical will be responsible for any mechanical issues that have to do with installation of the experimental apparatus in the magnet bore.
iii. PPD electrical will provide electronics and data acquistion system.
iv. TD will provide an LHC beam tube, a ~5T magnet with power & cryogens, and operational support for the magnet.
v. Experimenters agree to oversee experimental operations & to staff all available operations per a TBD schedule.
c. That ISM principles be applied and that both PPD (experimental apparatus) and TD (landlord & magnet issues) safety cooperate and establish joint responsibility for assuring safety.
d. That the Associate Director for Research and the head of Program Planning be kept informed of all the divisional MOU's.

Concerns: (These are issues which may need more attention, but that the committee feels can be resolved by the experiment with application of effort).
a. Magnetic shielding. Stray magnetic fields may exceed the earth's magnetic field. These fields should be characterized and shielded as reqquired.
b. Run plans should include a reasonable contingency on the maximum magnetic field that can be achieved.
c. A more sophisticated thermal model is needed. In particular the laser beam dump should be considered in more detail.
d. Operational scenarios at MTF need to be defined more clearly (based on further thinking and results of practical tests).
e. Scientific effort is a bit thin. The experimenters are encourage to recruit a few more participants.

We would encourage that more thought be given to some sort of experimental validation in the case of a null result. Some sort of controlled light leak would seem to be ideal, but we have no

useful, concrete suggestions to offer other than that the proponents continue to work on this and consult with knowledgable technical experts.

CONCLUSION: WE SUPPORT FUNDING AND MOUNTING OF THIS EXPERIMENTAL PROPOSAL IN THE TIME SCALE PROPOSED.

John Marriner, Chair
Ruben Carcagno
Hogan Nguyen
David McGinnis
Peter Wilson