



Department of Energy  
Washington, DC 20585

JUN 08 2007

*This is a great  
review. I was  
blown away!  
Rob*

Dr. Persis Drell  
Director of Particle and Particle Astrophysics  
Stanford Linear Accelerator Center  
2575 Sand Hill Road  
Menlo Park, California 94025

Dear Dr. Drell *Persis*

The Office of High Energy Physics organized and ran an external review of the Kavli Institute for Particle Astrophysics and Cosmology (KIPAC) at SLAC and Stanford on Jan. 29-30, 2007. The external review committee members were Drs. Brenna Flaugher, Timothy McKay, Nicholas Suntzeff, Martin White, and Joshua Frieman (Chair), assisted by John Kogut, the OHEP program officer for SLAC. Also representing DOE were Kathy Turner and P. K. Williams of OHEP. The purpose of this review was to assess the KIPAC program in high energy physics and understand how this institute relates to both the national high energy program and the more traditional high energy physics efforts at SLAC.

Attached to this letter please find our report of the findings of this review.

As you will see from the report, overall the science program of KIPAC is rated very highly. KIPAC is engaged in research activities, including dark matter and dark energy, which have been singled out for their importance to the national program in high energy physics in, for example, "Quantum Universe" and EPP 2010. The institute has grown with remarkable rapidity to become a world-class center in this field. The on-going transformation of both HEP in general and of SLAC in particular will present challenges to the continued success of this endeavor. SLAC management will be continuously challenged to maintain the focus and effectiveness of KIPAC as it grows and the field of particle astrophysics matures.

The report also brings up some concerns. These include the need to have more systematic criteria for deciding if a cosmological and/or astrophysics research area should be considered in the domain of high energy physics. You have shown considerable foresight in this area to date, but the challenges will continue. Another concern is the fact that the management of KIPAC appears to be spread too thin, with little time for their primary efforts in research and upper level guidance of the institute.

KIPAC acts as the intellectual center which fosters new ideas and projects in particle astrophysics. Some of these projects will need to be mid-sized in both timeline and



funding. Maintaining an optimal mix of projects and personnel will be a major challenge to the institute in the long run, particularly at times of limited funding opportunities.

Finally, we wish to congratulate SLAC and KIPAC in particular for an impressive start. We hope that you will address the issues raised in the report and look forward to your responses and continued excellence in your new endeavors.

Sincerely,

A handwritten signature in black ink, appearing to read "Robin Staffin". The signature is fluid and cursive, with a large initial "R" and "S".

Robin Staffin  
Associate Director  
Office of High Energy Physics

Enclosure