## Dear Colleague,

NASA formed the Primordial Polarization Program Definition Team (PPPDT) to help in the development of and science planning for a future cosmic microwave background polarization satellite. You are invited to read the charter of this committee and its membership on the PPPDT web site <a href="http://groups.physics.umn.edu/cosmology/PPPDT/">http://groups.physics.umn.edu/cosmology/PPPDT/</a> or at NASA's web site <a href="http://science.hq.nasa.gov/research/pppdtcharter.html">http://science.hq.nasa.gov/research/pppdtcharter.html</a>. We are writing to inform you of our work and to ask for specific input and suggestions.

The first issues that the PPPDT discussed were how to respond to NASA's recent solicitation for Strategic Mission Concept Studies and how to prepare our field for the review of the astronomy and astrophysics decadal panel that is due to begin deliberations sometime in 2008. The text of NASA's solicitation is posted at the PPPDT public web site given above.

The committee reached a consensus that our field has the best chance of strong vitality in the future if we coordinate our activities and present a compelling vision to the decadal panel. We envision a coherent set of presentations that will highlight the unique science that can be done with CMB polarization, that will discuss the challenges of foregrounds and systematic errors and how to mitigate them, and that will give examples of possible space missions that can achieve the required science goals. A common and united response to NASA's solicitation for strategic mission concept studies is the first step in making our voice more coherent and cohesive.

Many of us who had participated in the three groups that already conducted mission concept studies have agreed to work together under the umbrella of a single new proposal to NASA. Our plan is to select a PI who will coordinate both the proposal and the work during the ~12 months after the anticipated selection by NASA. Much of the funded work will revolve around the themes that are common to all mission concepts and that are likely to be most critical during the review by the decadal panel, including clarifying how compelling is the primary and ancillary science, and how future data sets and available techniques can address the challenge of foregrounds. Other funding will be directed toward further refinement of a subset of mission concepts which will then be presented to the decadal panel as example future missions. The report of the Weiss committee will serve as a corner stone for our work and we plan to build upon it and amplify it while leaving space for new developments in the field that have taken place since the report was written.

The PPPDT is seeking nominations for the PI of this common effort. We are also interested in your opinion regarding how our field should progress, and in suggestions for how to make our case in the decadal review as compelling as possible. Please write your comments to <a href="mailto:hanany@physics.umn.edu">hanany@physics.umn.edu</a>.