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Update on CMB Mission Concepts

SHAUL HANANY, University of Minnesota

Over the last several years there have been a number of proposals for a next generation CMB space mission, including PIXIE, CORE, and LiteBIRD. LiteBIRD is currently under Phase-A study in Japan. In May 2017 NASA commissioned an 18 months study of a CMB probe-scale mission that may fly sometime in the 2020s. This mission, called the Probe of Inflation and Cosmic Origins (PICO), is intended to fit in a cost window between \$400M - \$1000M. The study will conclude with a report to the 2020 decadal panel. I will describe the various mission concepts, giving special emphasis to the work of the US community on PICO, the status of the study, and the report to the decadal panel.