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CMB E-mode Science with the BICEP/Keck program CYNDIA YU, Stanford Univ, BICEP/KECK COLLABORATION — Precision measurements of the cosmic microwave background (CMB) polarization yield tremendous insights into the Standard Model, ΛCDM, and the history of our universe. While small-aperture polarimeters have traditionally focused on "B-mode" searches for signatures of primordial gravitational waves, the large angular scale E-mode power spectrum offers probes of interesting physics such as axion-like dark matter candidates, WIMP annihilations, and isocurvature perturbations. In this talk I will introduce the motivation for a ground-based large angular scale E-mode search. I will then outline how we leverage the fast mapping speed of the BICEP/Keck series of small aperture telescopes in a new wide-area scan strategy and present initial performance metrics from demonstration scans. Finally, I will discuss our projected sensitivity to E-mode science targets.

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