

Abstract Submitted
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The First Flight of SPIDER: Probing Inflation from the Stratosphere JEFF FILIPPINI, University of Illinois at Urbana-Champaign — Inflation is thought to have seeded the cosmos with a hum of primordial gravitational waves, which should have left a unique "B-mode" signature on the polarization of the cosmic microwave background. SPIDER is a powerful balloon-borne instrument designed to tease out this polarization pattern in the presence of obscuring Galactic foregrounds. SPIDER is also a pathfinder for Inflation Probe, deploying critical technologies in a space-like environment. I will present instrument performance and science results from SPIDER's successful long-duration balloon flight over the Antarctic ice, including constraints on primordial B-modes.

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