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Abstract for an Invited Paper for the 4CS21 Meeting of the American Physical Society

New Frontiers in UV Space Astrophysics ERIKA HAMDEN, University of Arizona

Ultraviolet astrophysics is experiencing a boom of interest, resulting in exciting mission development in space astrophysics. This boom is driven less by recent scientific discoveries (the UV has always been scientifically rich) but rather is driven by technology advancements due to investments and work over the past 2 decades. In this talk, I will highlight how work on detector, mirror, and spacecraft technology is opening up exciting opportunities in the UV and beyond. I will describe ongoing work to observe hydrogen gas halos around galaxies with two missions: balloon-telescope FIREBall-2 and Aspera, a newly funded NASA Pioneers SmallSat. I will also describe a mission in development, Hyperion, which explores a fundamental question for all of astrophysics- how is a star formed?