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Abstract for an Invited Paper for the 4CF15 Meeting of the American Physical Society

Hubble at 25: Looking Beyond the Eagle at Star and Planet Formation PAUL SCOWEN, APS

As we celebrate the 25th Anniversary of the launch of the Hubble Space Telescope in 2015, we will take the opportunity to use one of the most iconic images taken with the Observatory, that of the Eagle Nebula, or the "Pillars of Creation", to outline a story about star and planet formation. In our presentation we will revisit many of the images taken of Galactic nebulae with a view to understanding what they tell us about the process of forming a star and its attendant planetary system, and to understand the physics of these processes. In the particular case of looking at star formation around the most massive of stars, we will be looking back at our origins, as we discuss evidence that shows it was just this kind of environment in which our own Sun and our Solar System formed. Join us as we take an intimate look at the environment of a stellar nursery and an intriguing connection with the conditions under which our own planet may have formed, all while enjoying some of the best images the Hubble Space Telescope has taken over the past 25 years.