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Numerical Simulations of Planet Formation BENJAMIN BROM-

LEY, University of Utah, SCOTT KENYON, Smithsonian Astrophysical Observatory — Planets in the Universe abound. In addition to the planets of the Solar System, we now know of hundreds of exosolar planets. In this talk we discuss our current understanding of how these planets form. Our focus will be on a hybrid code to simulate the process of planet formation from young protostellar disks of gas and dust to evolved systems with relatively few, fully-formed planets. We present results and predictions from this code and describe insights it provides into the nature of observed planetary systems. One important motivation for this research is that it may help determine if planets elsewhere in the Universe harbor life.

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