Abstract Submitted for the DFD16 Meeting of The American Physical Society

Big Hydrophobic Capillary Fluidics; Basically Water Ping Pong in Space¹ MARK WEISLOGEL, BABAK ATTARI, ANDREW WOLLMAN, KARL CARDIN, JOHN GEILE, THOMAS LINDNER, Portland State University — Capillary surfaces can be enormous in environments where the effects of gravity are small. In this presentation we review a number of interesting examples from demonstrative experiments performed in drop towers and aboard the International Space Station. The topic then focuses on large length scale hydrophobic phenomena including puddle jumping, spontaneous particle ejections, and large drop rebounds akin to water ping pong in space. Unseen footage of NASA Astronaut Scott Kelly playing water ping pong in space will be shown. Quantitative and qualitative results are offered to assist in the design of experiments for ongoing research.

¹NASA NNX12A047A

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Date submitted: 28 Jul 2016

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