Abstract Submitted for the MAR10 Meeting of The American Physical Society

Eukaryotic cell flattening¹ ALBERT BAE, LASSP, Cornell University, Ithaca and MPI for Dynamics and Selforganization, Goettingen, CHRISTIAN WESTENDORF, MPI for Dynamics and Selforganization, Goettingen, CHRISTOPH ERLENKAMPER, Saarland University, EDOUARD GALLAND, Ecole Polytechnique, CARL FRANCK, LASSP, Cornell University, Ithaca, EBERHARD BODENSCHATZ, LASSP, Cornell University, Ithaca and MPI for Dynamics and Selforganization, Goettingen, CARSTEN BETA, Institute for Physics and Astronomy, University of Potsdam and MPI for Dynamics and Selforganization, Goettingen — Eukaryotic cell flattening is valuable for improving microscopic observations, ranging from bright field to total internal reflection fluorescence microscopy. In this talk, we will discuss traditional overlay techniques, and more modern, microfluidic based flattening, which provides a greater level of control. We demonstrate these techniques on the social amoebae Dictyostelium discoideum, comparing the advantages and disadvantages of each method.

¹This work was supported by the Deutsche Forschungsgemeinschaft (SPP 1128), the National Institutes for Health, and the Max Planck Gesellschaft.

Albert Bae LASSP, Cornell University, Ithaca and MPI for Dynamics and Selforganization, Goettingen

Date submitted: 14 Dec 2009 Electronic form version 1.4