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**Eukaryotic cell flattening**¹ 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 BODEN-SCHATZ, 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.

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