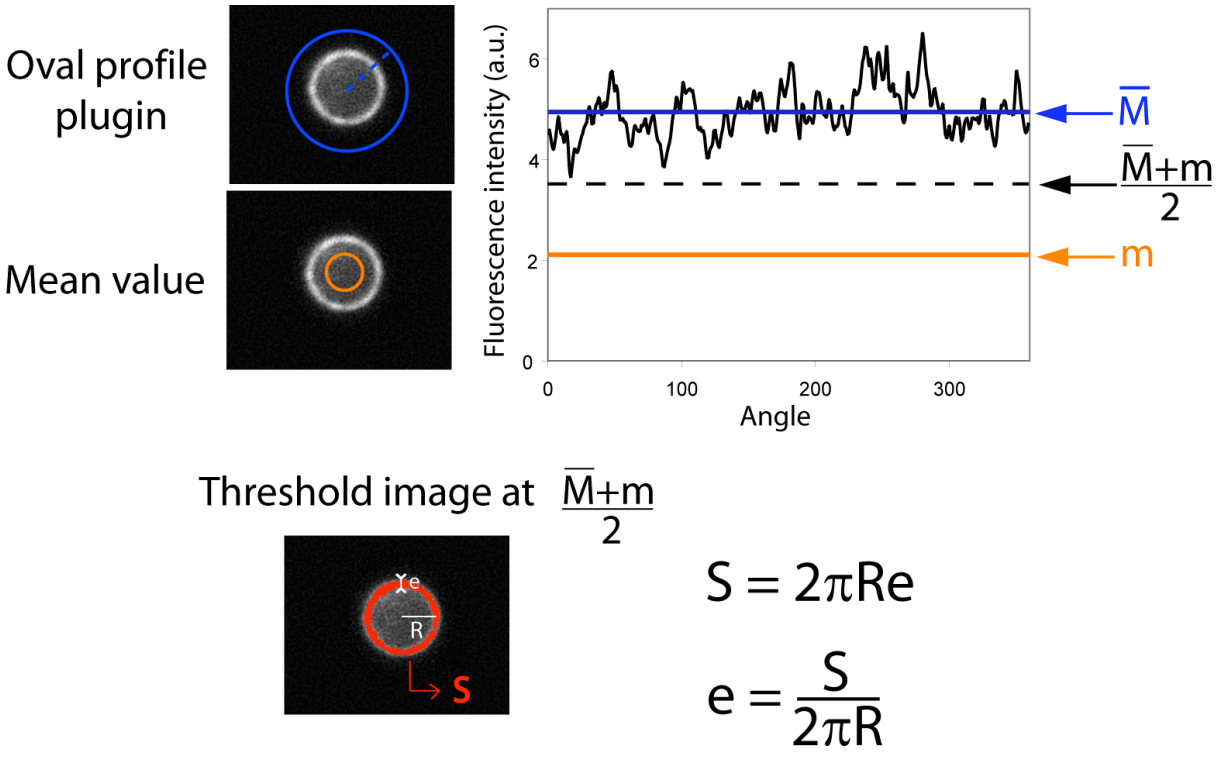
Biophysical Journal, Volume 96

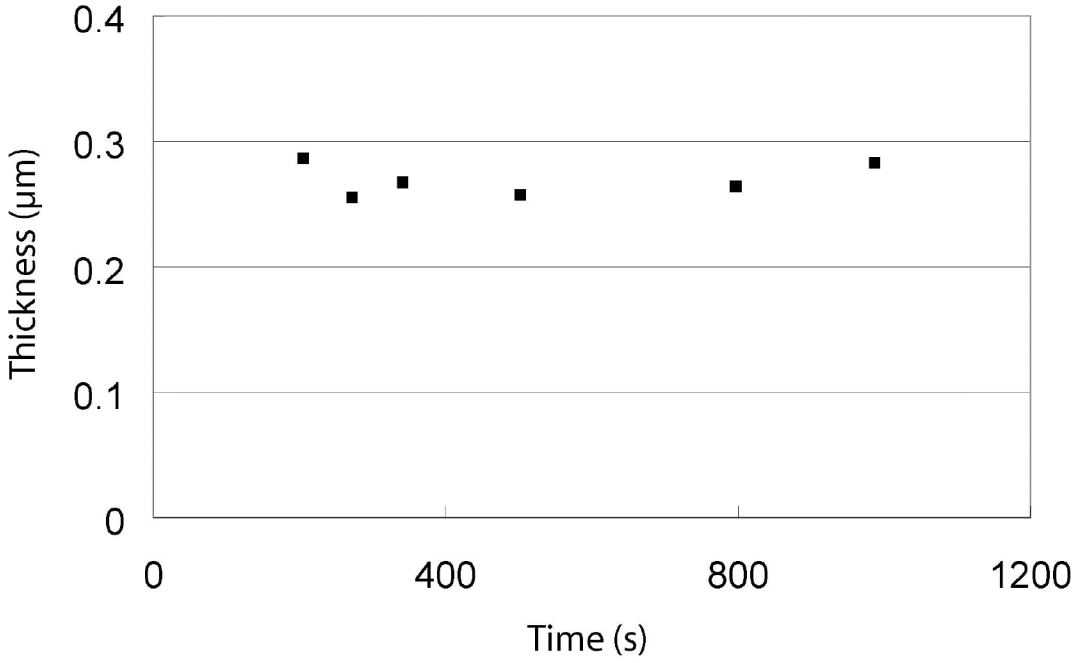
Supplementary Material

Reconstitution of an Actin Cortex Inside a Liposome

Léa-Laetitia Pontani, Jasper van der Gucht, Guillaume Salbreux, Julien Heuvingh, Jean-François Joanny, and Cécile Sykes



Supplementary Figure 1 : Shell thickness measurement. Using the plug-in "Oval Profile Plot" on deconvoluted images, the maximum intensity value along the radius starting from the center of the GUV to a circle around the liposome (blue circle) was taken. This measure was repeated 360 times by rotating the radius, producing a circumferential profile (black curve). These maximum intensity values were averaged to obtain the $\overline{M}$ value (blue line). The mean intensity value inside the liposome was obtained as the average intensity of a disk (defined by the orange line) centered in the liposome and with a radius equal to half the radius R of the liposome. Threshold on the image is set at $\frac{\overline{M}+m}{2}$. The surface of the obtained ring (red donut surface) is measured to obtain the actin shell thickness e.



Supplementary Figure 2: Actin shell thickness as a function of time. The thickness of the actin shell was measured on the same liposome as described in Materials and Methods. Each point represents one of those measurements, set at different times after introduction of the pores (taken as zero time).