Liquid droplets on a solid surface

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We will present several aspects of the modeling of small liquid droplets lying or sliding on a solid surface. It is well understood that stationary droplets should satisfy Young-Laplace laws, which correspond to a fairly classical free boundary problem. The modeling of moving droplets, however, is considerably more difficult and far from fully understood. We will present some of the (simplified) models that have been proposed, and discuss their mathematical properties. One of our main interest will be to describe the effects of small inhomogeneities on the shape and behavior of the droplets.

The lecture will take place in Thackeray 704 at 3:30pm.
Refreshments will start at 3:00pm.