



## Bubble Bombing

Shelby Cave

1st place, 1994

This photograph shows a water drop, released from a pipette, shortly after the drop has passed through the surface of a soap bubble into the bubble's interior. The flash unit that illuminated the scene was placed underneath and pointing upward through the plastic sheet on which the bubble rested. The flash unit was triggered after a predetermined time delay by the passage of the drop through a photogate.

The bubble's upper surface is momentarily flattened by the collision with the drop. Photos taken at later times show a pulse traveling down the sides of the bubble. The color bands are the result of thin-film interference of light bent by the inner and outer layers of the bubble's surface. The colors shift and change as the surface drains. The lower image is a reflection of the bubble from liquid on the plastic base.