

## PHYSICAL CHEMISTRY & FORMULATION

**S. Nagel**, University of Chicago, USA

### **The Life and Death of a Drop : Transitions and Singularities**

Because fluids flow and readily change their shape in response to small forces, they are often used to model phenomena as diverse as the dynamics of star formation or the statics of nuclear shape. Moreover, fluids can easily break apart and thus are also an excellent starting point for investigating topological transitions. Although part of our common everyday experience, these transitions are far from understood.

In this lecture, I will give the life history of a liquid drop - from its birth as a pendant fluid to its eventual demise, after splashing, as it vanishes into air. During its brief life, the drop reveals delightful and profound surprises about the physics underlying its existence.

