There are motions which describe the evolution of bodies in accordance with their geometric shape. Such motions include motions in which the body's normal velocity is determined by the curvature of its exterior surface or in accordance with the Laplacian of this curvature, and more. Examples of such motions are to be found in nature. During the project week, we will begin to understand how to approach questions of existence and uniqueness for such motions, and the study of their dynamics.

Prerequisites: ODEs, Intro Applied Math (a little Numerics or PDE won't hurt).