Monday, Nov. 4
4:00 p.m.
Science Center
Room 300

The tears that surround your eye are an integral part of proper eye function. Dry-eye is a condition in which the tear film thins to a point where it loses its ability to function properly. The use of contact lenses in some patients can increase the likelihood of this condition.

Through this talk, I will introduce the mechanics of the tear film (Navier-Stokes Equations) in a thin film, lubrication theory setting. This system is solved numerically, and the results are then used to determine the influences certain boundary conditions - such as the evaporation rate of the tears - have on the drying of the tear film.