Abstract Submitted
for the MAR17 Meeting of
The American Physical Society

Stress-Strain Measurements of Semi-Aquatic Snake Lenses NISHA LAMA, DR. DAVID NORWOOD, DR. CLIFF FONTENOT, ADDISON WALLACE, MAHITHA KODURI, DR. RHETT ALLAIN, Southeastern Louisiana Univ
— It is of interest to understand the mechanism by which semi-aquatic maintain visual acuity when moving from land to underwater. Toward that end, we are interested in the mechanical properties of snake lenses and how this might affect the ability of snakes to deform the lens and thus alter the lens power. In this presentation, we will present data taken with a force sensor and a rotary motion sensor to measure, in one shot, force versus displacement, from which we estimate mechanical properties of stress and strain of the eye lens of a water snake. We will compare the results from lenses freshly removed from snake to those that have been stored. More importantly though, we will compare results from one species of semi-aquatic snakes to the other species of interest

Nisha Lama
Southeastern Louisiana Univ

Date submitted: 13 Nov 2016 Electronic form version 1.4