1126-35-126 Lorena Bociu* (lvbociu@ncsu.edu), SAS 3236, Stinson Drive, Raleigh, NC 27695. Sensitivity Analysis in Poro-Elastic and Poro-Visco-Elastic Models.

We consider poro-elastic and poro-visco-elastic models inspired by problems in medicine and biology, and we perform sensitivity analysis on the solutions of these fluid-solid mixtures problems with respect to the imposed boundary data, which are the main drivers of the systems. Moreover, we compare the results obtained in the elastic case vs. visco-elastic case, as it is known that structural viscosity of biological tissues decreases with age and disease. (Received January 09, 2017)