1165-35-233 **John R. L. Anderson*** (jranders@math.princeton.edu). *Stability results for anisotropic systems of wave equations.* Preliminary report.

In this talk, I will present a global stability result for a nonlinear anisotropic system of wave equations. This is motivated by studying phenomena involving characteristics with multiple sheets. For the proof, I will describe a strategy for controlling the solution based on bilinear energy estimates. Through a duality argument, this will allow us to prove decay in physical space using decay estimates for the homogeneous wave equation as a black box. The final proof will also require us to exploit a certain null condition that is present when the anisotropic system of wave equations satisfies a structural property involving the light cones of the equations. (Received January 18, 2021)