1126-35-347   **Matthias Eller*** (`mme4@georgetown.edu`), Department of Mathematics, Georgetown University, 37th & O Street NW, Washington, DC 20007. *On the Neumann trace of the Cauchy-Dirichlet problem for the wave equation.* Preliminary report.

The Cauchy-Dirichlet problem for the wave equation is considered. The Neumann trace of the spatial boundary of finite energy solutions is known to be square integrable. In this talk we discuss the relation between the initial velocity and the Neumann trace in more detail. We will explain how discontinuities of the initial velocity travel along bicharacteristic rays toward the boundary and produce a discontinuity of the Neumann trace. Furthermore, a new estimate of the Neumann trace in terms of the initial velocity will be given. (Received January 17, 2017)