1125-35-2485 Magdalena Czubak* (magda.czubak@colorado.edu). Almost sure wellposedness for 2D wave equations with null forms. Part I.

The null condition was introduced by Klainerman. The nonlinearities exhibiting null structure appear in many systems including Wave Maps, Yang Mills, Maxwell-Klein-Gordon and the space-time Monopole equation. Two dimensions create obstacles towards low regularity wellposedness that are not present in higher dimensions. In this talk we describe recent progress on improving the wellposedness results by suitably randomizing the initial data. We discuss both a periodic and nonperiodic setting. (Received September 20, 2016)