1120-35-110   **Mihai Tohaneanu*** (`mihai.tohaneanu@uky.edu`), Department of Mathematics, 719 Patterson Office, Lexington, KY 40506. *Global existence for quasilinear wave equations close to Schwarzschild.*

We study the quasilinear wave equation $\Box_g u = 0$, where the metric g depends on u and equals the Schwarzschild metric when u is identically 0. Under a couple of extra assumptions on the metric g near the trapped set and the light cone, we prove global existence of solutions. This is joint work with Hans Lindblad. (Received February 17, 2016)