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Boris Ettinger* (ettinger@math.berkeley.edu), Department of Mathematics, University of California, Berkeley, 970 Evans Hall, Berkeley, CA 94720-3840. *Local well-posedness for the minimal hypersurface equation in Minkowski space-time.*

The minimal hypersurface equation for Lorentzian hypersurfaces of the Minkowski space-time is a quasi-linear wave equation. The equation exhibits a cancellation known as a null condition. Smith and Tataru established the sharp regularity result for a general quasi-linear wave equation. We will explain how their strategy in tandem with the null condition can be used to lower the regularity of the initial data required for the well-posedness of the minimal hypersurface equation. (Received December 13, 2011)