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**Jeremy L Marzuola\*** (jm3058@columbia.edu), 200 S.W. Mudd Building, MC 4701, 500 W. 120th St., New York City, NY 10027, and **Herbert Koch** (koch@math.uni-bonn.de), Endenicher Allee 60, 53115 Bonn, NRW, Germany. *Dispersive estimates for the linearized Quartic KdV equation and applications.*

In this note we prove refined estimates for the linearized KdV operator, which allow us to prove scattering for perturbations of solitons in the scaling space appropriate for the quartic nonlinearity,  $\dot{H}^{-\frac{1}{6}}$ . This is an improvement of the work of Tao in that we are able to work purely in the scaling space without additional regularity assumptions. (Received August 20, 2009)