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Jeremy L Marzuola* (marzuola@math.unc.edu). *Small data global solutions for the Camassa-Choi equations.*

In joint work with Benjamin Harrop-Griffiths, we consider solutions to the Cauchy problem for an internal-wave model derived by Camassa-Choi (1996). This model is a natural generalization of the Benjamin-Ono and Intermediate Long Wave equations in the case of weak transverse effects. We prove the existence and long-time dynamics of global solutions from small, smooth, spatially localized initial data on \mathbb{R}^2 . (Received September 18, 2017)