

1116-76-2835 **Robin Ming Chen** (mingchen@pitt.edu), **Samuel Walsh** (walshsa@missouri.edu) and **Miles H. Wheeler*** (mwheeler@cims.nyu.edu). *Stratified solitary waves.*

We consider solitary water waves with a free surface on a stream with arbitrary density and velocity profiles. After proving symmetry results and bounds on the wave speed, and after ruling out the existence of certain types of monotone bores, we construct a continuous curve of large-amplitude solutions. As one moves along this curve, the horizontal fluid velocity comes arbitrarily close to the wave speed. (Received September 22, 2015)