1171-35-222 **Jeremy L Marzuola***, University of North Carolina at Chapel Hill, Chapel Hill, NC 27599. General properties of perturbed Airy equation and applications to soliton stability for generalized KdV.

I will discuss joint work with Herbert Koch in which we revisit the spectral stability of the linearized generalized KdV equation to prove the absence of embedded eigenvalues in general as well as establish a functional framework to somewhat simplify the question of soliton stability. (Received August 16, 2021)