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Milena Stanislavova* (stanis@ku.edu), Department of Mathematics, University of Kansas, Lawrence, KS 66045. *Spectral Stability for Classical Periodic Waves of the Ostrovsky and Short Pulse Models.*

We consider the Ostrovsky and short pulse models in a symmetric spatial interval, subject to periodic boundary conditions. For the Ostrovsky case, we re-derive the formulas for the classical periodic traveling waves, while for the short pulse model, we explicitly construct traveling waves in terms of Jacobi elliptic functions. In both cases, we show spectral stability, for all values of the parameters. This is achieved by studying the non-standard eigenvalue problems in the form $L[u] = \lambda u'$, where L is a Hill operator. (Received January 05, 2017)