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Milena Stanislavova* (stanis@ku.edu), Department of Mathematics, 405, Snow Hall, 1460 Jayhawk Blvd., Lawrence, KS 66045, and **Sevdzhan Hakkaev** and **Atanas Stefanov**. *Spectral Stability for Classical Periodic Waves of the Ostrovsky and Short Pulse Models*. Preliminary report.

We consider the Ostrovsky and short pulse models in a symmetric spatial interval, subject to periodic boundary conditions. For the Ostrovsky case, we revisit the classical periodic traveling waves and for the short pulse model, we explicitly construct traveling waves in terms of Jacobi elliptic functions. For both examples, we show spectral stability, for all values of the parameters. This is achieved by studying the non-standard eigenvalue problems in the form $Lu = \lambda u'$, where L is a Hill operator. (Received September 17, 2016)