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Solitary wave interaction in a compact equation for deep-water gravity waves

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In this study we compute numerical traveling wave solutions to a compact version of the Zakharov equation for unidirectional deep-water waves recently derived by Dyachenko & Zakharov (2011) Furthermore, by means of an accurate Fourier-type spectral scheme we find that solitary waves appear to collide elastically, suggesting the integrability of the Zakharov equation.

Comments: 8 pages, 5 figures, 23 references. Other author's papers can be downloaded at [this http URL](#) . arXiv admin note: text overlap with [arXiv:1204.2889](#)

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