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Svetlana Roudenko* (sroudenko@fiu.edu), Department of Mathematics and Statistics, Florida International University, Miami, FL 33199. *Stability of solitary waves in the generalized Benjamin-Ono equation and its 2d extension.*

We discuss solitary wave solutions in the generalized Benjamin-Ono equation, including the critical and supercritical cases. We then look at its higher-dimensional, fractional generalization in 2d, called the HBO equation, and examine the behavior of solutions in various cases as well as stability of solitary waves. (Received August 31, 2021)