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*Persistence properties for solutions of dispersive equations involving non-local operators.*

In general, solutions to nonlinear dispersive equations involving non-local operators do not propagate polynomial weights of arbitrary magnitude, and the maximum decay rate allowed by such models is related to the dispersive part of the equation. This talk aims to show our results on the preceding questions for some higher dimensional versions of the Benjamin-Ono equation, and the fractional KdV equation. A key ingredient is the deduction of several commutator estimates for Hilbert, Riesz, and fractional derivative operators. (Received August 29, 2021)