

SOME RESULTS ABOUT A DISSIPATIVE VERSION OF THE BENJAMIN ONO EQUATION

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Abstract

We study the well-posedness in weighted Sobolev spaces, for the dissipative Benjamin-Ono(dBO) equation. We establish the persistence properties of the solution flow in the weighted Sobolev spaces $\mathcal{Z}_{s,r} = H^s(\mathbb{R}) \cap L^2(|x|^{2r} dx)$, $s \geq r > 0$. We also prove some unique continuation properties in these spaces.

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