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*Numerical simulation for Derivative Nonlinear Schrodinger Equation*

We present the numerical simulation of generalized Derivative Nonlinear Schrodinger Equation (gDNLS):

$$i\phi_t + \phi_{xx} + i|\phi|^{2\sigma}\phi_x = 0.$$

In the case of  $\sigma = 1$ , it describes the long wavelength dynamics of dispersive Alfvén waves propagation. We observe that for  $\sigma > 1$ , solutions may develop a singularity after a finite time, and we give a precise form of the blow up rate and the solution profile.