

A NOTE ON DARK SOLITONS IN NONLINEAR COMPLEX GINZBURG-LANDAU EQUATIONS

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Abstract. We analyze the existence of dark solitons in nonlinear complex Ginzburg-Landau equations. We prove existence results concerned with the initial value problem for these equations in Zhidkov spaces using a new approach with splitting methods.

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Key words. Ginzburg-Landau equation, splitting methods, well posedness.

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